THE Public Interest

NUMBER 18, WINTER 1970, PRICE: $1.50

Reexamining the Military Budget

Charles L. Schultze

The Blindness System . . . . . *Donald A. Schon*

When Government Works . . . . . *Robert C. Wood*

The Future of Urban Transportation

Mass Transportation:
Cinderella in Our Cities . . . . . *Thomas E. Lisco*

Transportation and Poverty . . . . . *John F. Kain and John R. Meyer*

A Policy for Urban Growth

Where Shall They Live? . . . . . *James L. Sundquist*

Where Shall the Money
Come From? . . . . . *Charles M. Haar and Peter A. Lewis*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE Public Interest

NUMBER 18, WINTER 1970

CONTENTS

Reexamining the Military Budget	*Charles L. Schultze*	3
The Blindness System	*Donald A. Schon*	25
When Government Works	*Robert C. Wood*	39
The Future of Urban Transportation		
I. Mass Transportation: Cinderella in Our Cities	*Thomas E. Lisco*	52
II. Transportation and Poverty	*John F. Kain and John R. Meyer*	75
A Policy for Urban Growth		
I. Where Shall They Live?	*James L. Sundquist*	88
II. Where Shall the Money Come From?	*Charles M. Haar and Peter A. Lewis*	101
Current Reading		113
Contributors		100

THE PUBLIC INTEREST is published quarterly by National Affairs, Inc., and appears in Spring, Summer, Autumn, and Winter issues. Its office of publication is located at 404 Park Avenue South, New York, N. Y. 10016. Subscription price: $5.00 per year. Second class postage is paid at New York, N. Y. © 1969 by National Affairs, Inc.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Editors
Daniel Bell and Irving Kristol

Publisher
Warren Demian Manshel

Publication Committee
Stanley Simon (Chairman)
Orville G. Brim, Jr.
Nathan Glazer
Daniel P. Moynihan (on leave)
Arthur J. Rosenthal
Leo Rosten
Martin E. Segal
Arthur L. Singer, Jr.
Robert M. Solow
Roger Starr
James Q. Wilson

Associate Editor
Paul Weaver

Assistant Editor
Myrna Chase Engelmeyer

Editorial Office
c/o Basic Books, Inc.
404 Park Avenue South, N. Y. 10016

Business Office
The Public Interest
P.O. Box 542 Old Chelsea
New York, New York 10011

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Reexamining the military budget

CHARLES L. SCHULTZE

OVER the next several years, the Executive and the Congress will face a series of basic decisions on military programs and weapons systems the outcome of which will largely determine not only the nation's security and its military posture, but also the resources available to meet urgent domestic needs. It will be most unfortunate if these decisions are made piecemeal, without reference to their effect on nonmilitary goals and priorities. Moreover, in any one year the decisions on military programs—and, in fact, on many elements of the civilian budget—cast long, and usually wedge-shaped shadows into the future. Their cost in the initial budget year are often only a small fraction of the costs incurred in succeeding years.

For these reasons there are two major prerequisites to informed discussion and decision about military budgets.

First, the benefits and costs of proposed military programs cannot be viewed in isolation. They must be related to and measured

---

The views expressed in this paper—which is adapted from testimony before the Subcommittee on Economy in Government of the Joint Economic Committee—are those of the author and do not necessarily represent the views of the trustees, the officers, or other staff members of the Brookings Institution.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

against those other national priorities that, in the context of limited resources, their adoption must necessarily sacrifice.

Second, the analysis of priorities must be placed in a longer-term context than the annual budget because annual decisions—particularly with respect to large military forces or weapons systems—usually involve the use of scarce national resources, and therefore affect other national priorities well into the future.

I might also add, parenthetically, that a review of military budgets in the context of a long-run evaluation of national priorities can directly serve the interests of national security itself. In the past year there has sprung up a widespread skepticism about the need, effectiveness, and efficiency of many components of the defense budget. This is a healthy development. But it must be harnessed and focused. In particular it must not be allowed to become a "knee-jerk" reaction, such that any proposed new military program is automatically attacked as unneeded or ineffective. We still live in a dangerous world. Effective and efficient provisions for the national security should rightfully be given a high priority. I believe that a proper balancing of military and civilian programs can best be achieved by a careful and *explicit* public discussion and evaluation of relative priorities in a long-term budgetary context. Neither the extreme that automatically stamps approval on anything carrying the national security label, nor its opposite that views any and all military spending as an unwarranted waste of national resources, has much to recommend it as a responsible attitude.

In this context I should like to discuss three major aspects of the problem of national priorities:

- A five-year summary projection of federal budgetary resources and the major claims on those resources.
- A more detailed examination of the basic factors which are likely to determine the military component of those budget claims.
- Finally, some tentative suggestions for improving the process by which defense budget decisions are made, designed particularly to bring into play an explicit consideration and balancing of national priorities, both military and civilian.

The budgetary framework

By definition, the concept of "priorities" involves the problem of choice. If, as a nation, we could have everything we wanted, if there were no constraints on achieving our goals, the problem of priorities would not arise. But once we recognize that we face limits or constraints, that we cannot simultaneously satisfy all the legitimate objectives that we might set for ourselves, then the necessity for *choice* arises.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There are various kinds of constraints. There is probably some limit to the public "energy" of a nation. Psychologically, the nation and its leaders cannot enthusiastically pursue a very large number of energy-consuming goals at the same time. The psychic cost is too high. Sometimes we face limits imposed by the scarcity of specific resources. What we can do quickly, for example, to improve the availability of high quality medical care is limited in the short run by the scarcity of trained medical personnel. But the most pervasive limit to the achievement of our goals, even in a wealthy country like the United States, is the general availability of productive resources. If the economy is producing at full employment, additions to public spending require subtractions from private spending—and vice versa.

From the point of view of public spending, the practical constraints we face are even tighter than this. I think it is a safe political prediction that during the next five years or so, and particularly once a settlement in Vietnam is reached, federal tax rates are unlikely to be raised. Reforms may, and should, occur. But average tax rates in the system are unlikely to be increased. If this judgment is correct, then the limits of budgetary resources available are given by the revenue yield of the existing tax system—a yield that will, of course, grow as the economy grows. And even those who believe that the needs of the public sector are so urgent as to warrant an increase in federal tax rates are likely to agree that an examination of long-term budgetary prospects should at least start with a projection of revenue yields under current tax laws.

Assuming for purposes of projection an initial constraint imposed by existing tax laws, it is then possible to determine roughly how large the budgetary resources available to the nation will be over the next five years, for expanding existing high-priority public programs, for creating new ones, for sharing revenues with the states or for reducing federal taxes. The magnitude of the budgetary resources available for these purposes—the "fiscal dividend"—will depend on *four basic factors*. The first two *add* to the fiscal dividend available for purposes listed above and the last two *reduce* it.

1. The growth in federal revenues yielded by a *growing economy*.
2. The budgetary savings that could be realized from a *cease-fire and troop withdrawal in Vietnam*.
3. The "built-in" or "automatic" increase in *civilian expenditures* that accompanies growing population and income. (This expenditure growth must be deducted before arriving at the net budgetary resources available for discretionary use.)
4. The probable increase in *non-Vietnam military expenditures* implicit in currently approved programs and postures. (This increase must also be deducted to reach the net fiscal dividend that can be devoted to domestic needs. Of course, changes in programs, policies, and force levels can affect this.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The net result of these four factors—the revenue yield from economic growth, the savings from a Vietnam ceasefire, the built-in growth of civilian expenditures, and the probable growth of the non-Vietnam military budget—measures the fiscal dividend available for meeting domestic needs.

Some estimates

Let me summarize the likely magnitude of each of these four budgetary elements five years from now. More precisely, I will attempt to project them from fiscal 1969 to fiscal 1974.

If we assume that economic growth continues at a healthy but not excessive pace, and that, optimistically perhaps, the annual rate of inflation is gradually scaled down from the current 4½ per cent to a more tolerable 2 per cent, *federal revenues should grow each year by $15 to $18 billion.* This is, of course, a cumulative growth, so that by the end of five years federal revenues should be about $85 billion higher than they are now. It is highly likely, however, that once the war is over, or substantially scaled down, the 10 per cent surcharge will be allowed to expire. The yield of the surcharge five years from now would be some $15 billion. This must therefore be subtracted from the revenue increase, leaving a net $70 billion growth in federal revenue by fiscal 1974.

A second potential addition to budgetary resources is the expenditure saving that could be realized upon a *Vietnam ceasefire and troop withdrawal* and a return to the pre-Vietnam level of armed forces. The current budget estimates the cost of military operations in Vietnam at about $25 billion. However, this figure overstates somewhat the *additional* costs we are incurring in Vietnam; i.e. if our naval task forces were not deployed in the Gulf of Tonkin, they would be steaming on practice missions elsewhere, incurring some of the costs of those forces even in the absence of fighting in Vietnam. Similarly, if not engaged in bombing missions, our B-52 squadrons would be operating on training exercises. And the same is true for other activities. As best I can judge, the truly incremental, or additional, costs of Vietnam—which would disappear if a ceasefire and a return to pre-Vietnam force levels occurred—amounted in 1969 to about $20 billion. (In the current fiscal year, 1970, Vietnam costs appear to be running somewhat lower than this, perhaps $17 billion.) These savings would not, of course, be available the day after a ceasefire occurred, but would gradually be realized as withdrawal and demobilization occurred. Within perhaps 18 months to two years after a ceasefire, the $20 billion in budgetary savings would be available to add to the $70 billion net growth in budget revenues—a total gross addition of $90 billion to resources available for other public purposes.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

From this $90 billion, we must, however, make several deductions before arriving at a net fiscal dividend freely available for domestic use. We can expect a fairly significant built-in growth in federal civilian expenditures over the next five years. As the GI's come home from Vietnam, educational expenditures under the GI bill of rights will naturally increase. Even if interest rates rise no further, the roll-over of older debt into new issues will increase interest payments. Expenditures under the Medicaid program will rise, although at a slower pace than in the last few years. A larger population and income almost automatically lead to higher public expenditures in many areas: more people visit national parks and the Park Service's outlays grow; more tax returns are filed and the Internal Revenue Service must expand to handle them; as airplane travel increases, federal expenditures on air traffic safety and control rise; and so on down the list. Social security benefits will almost certainly rise sharply if past practice is followed under which the Congress tends to raise benefit levels more or less in line with payroll revenues. For all of these reasons, I believe one must allow for a "built-in" growth of federal expenditures by at least $35 billion over the next five years. Subtracting this $35 billion from the $90 billion additional resources calculated above leaves $55 billion for the fiscal dividend.

Non-Vietnam spending

But yet another deduction must be made. Barring major changes in defense policies, military spending for *non-Vietnam* purposes will surely rise significantly over the next five years. There are *five* major factors working towards an increase in military expenditures.

1. *Military and civilian pay increases.* There are now 3.5 million men in the Armed Forces. In addition some 1.3 million civilian employees, about 45 per cent of the federal total, work for the Department of Defense. As wages and salaries in the private sector of the economy rise, the Department of Defense pay scales must also be raised. The military and civilian pay raise scheduled for this coming July 1 will add some $2.3 billion to the Defense budget. If we assume, conservatively, that in succeeding years private wage and salary increases average 4 to 4.5 per cent per year, the payroll costs of the Pentagon will rise by about $1.5 billion each year.

2. *The future expenditure consequences of already approved weapons systems.* A large number of new and complex weapons systems have been approved as part of our defense posture, the bulk of the spending on which has not yet occurred.[1] For example:

[1] For most of the systems listed below, the decision to procure the item has already been made. In a few cases, such as the Navy's VSX antisubmarine plane, procurement has not yet been approved, but development is well along, and official statements of Defense Department officials have already indicated that the system is most likely to be approved.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

- the Minuteman III missile, with MIRVs; cost, $4.5 billion
- the Poseidon missile, with MIRVs; cost, including conversion of 31 Polaris subs, $5.5-$6.5 billion
- the Safeguard ABM system, with a currently estimated cost, including nuclear warheads, of some $8 billion, plus hundreds of millions per year in operating costs
- the F-14 Navy fighter plane in three versions; the 1970 posture statement indicates that the entire F-4 force of the Navy and Marine Corps may be replaced by the F-14. If so, the total investment and operational cost of this system over a 10 year period should be in excess of $25 billion
- a new F-15 air-to-air combat fighter for the Air Force
- three nuclear attack carriers at a currently estimated cost of $525-$540 million each
- 62 new naval escort vessels, at an investment cost of nearly $5 billion
- a number of new amphibious assault ships
- a new Navy anti-submarine plane, the VSX, at a cost of $2-$2.5 billion
- a new continental air-defense system, including a complex "look-down" radar and an extensive modification program for the current F-106 interceptor.

These do not exhaust the list of new weapons systems already a part of the approved defense posture. But they do give some idea of the magnitude of the expenditures involved.

3. *Cost escalation.* The weapons systems costs given for each of the systems listed above represent current estimates. But past experience indicates that final costs of complex military hardware systems almost always exceed original estimates.

- a study of missile systems in the 1950's and early 1960's revealed that the average unit cost of missiles was 3.2 times the original estimates.
- the nuclear carrier Nimitz, now under construction, was estimated in 1967 to cost $440 million. One year later the estimate was raised to $536 million. No new estimates have been released, but given the rapidly rising cost of shipbuilding, it is almost certain that this latter figure will be exceeded.
- in January 1968 the Defense Department proposed a plan for building 68 naval escort vessels at a total cost of $3 billion. In January 1969 the estimated costs of that program had risen to $5 billion.
- the cost of modernizing the carrier Midway was originally given as $88 million, and the work was scheduled to be completed in 24 months. In January 1969 the cost estimate was doubled, to $178 million, and the time estimate also doubled, to 48 months.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In many cases the rising unit costs of these systems force reevaluation of the program and a reduction in the number purchased. (The F-111 program is a classic case in point.) Consequently the *aggregate* costs of the procurement budget do not rise by the same percentage as the inflation in *unit* costs. Nevertheless, cost escalation does tend to drive the total military budget upward.

4. *Weapons systems under development, advocated by the Joint Chiefs of Staff, but not yet approved for deployment.* In addition to weapons systems already approved, there are a large number of systems, currently under development that are being advocated for deployment by the Joint Chiefs. Among these items are:

- the AMSA—advanced manned strategic aircraft—a supersonic intercontinental bomber designed as a follow-on to the B-52. President Johnson's proposed 1970 budget requested $77 million for advanced development. Secretary Laird proposed an additional $23 million to shorten design time and start full-scale engineering development. This $100 million will be supplemented by $35 million of carryover funds. The investment cost of the AMSA, if procurement decision is made, are difficult to estimate, but it is hard to see how they could be less than $12 billion
- the new main battle tank is now in production engineering. Depending on the number purchased, a procurement decision will involve investment costs of $1 to $1.5 billion
- a new advanced strategic missile in super-hard silos is being advocated by the Air Force
- a new attack aircraft, the AX, is under development for the Air Force
- the Navy is proposing a major shipbuilding and reconversion program to replace or modernize large numbers of its older vessels
- a new continental air defense interceptor, the F-12, is being advocated by the Air Force
- a new underwater strategic missile system (the ULMS) is under development for the Navy

In the normal course of events, not all of these new systems will be adopted in the next five years. But, in the normal course of events, some will be.

5. *Mutual escalation of the strategic arms race.* The United States is currently planning to equip its Minuteman III and Poseidon missiles with multiple independently targeted reentry vehicles (MIRVs). MIRV testing has been underway for some time. The original purpose of MIRVs was as a hedge against the development of a large-scale Soviet ABM system, in order to preserve our second-strike retaliatory capability in the face of such Soviet development. Recently, however, Pentagon officials have indicated that we are

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

designing into our MIRVs the accuracy needed to destroy enemy missile sites—an accuracy much greater than needed to preserve the city-destroying capability of a retaliatory force. Secretary of Defense Laird, in recent testimony before the Armed Services Committee, for example, asked for additional funds to "improve significantly the accuracy of the Poseidon missile, thus enhancing its effectiveness against hard targets."

Putting MIRVs with hard-target killing capabilities on Poseidon alone will equip the US strategic forces with 4000-5000 missile-destroying warheads. Viewed from Soviet eyes the United States appears to be acquiring the capability of knocking out Soviet land-based missile force in a first strike. It might be argued that the difficulties of attaining a hard-target killing capability on our MIRVs are so great that the objective will not be realized for many years, if ever. But without attempting to evaluate this observation, let me point out that what counts in the arms race is the Soviet reaction to our announcement. And, like our own conservative planners, the Soviets must assume that we will attain our objectives.

The United States has announced that in answer to the 200 Soviet SS-9's—which may be expanded and MIRVs into 800 to 1000 hard-target warheads—it will build an ABM system. What must the Soviets think of our announced intentions to put 4000-5000 hard-target killers on Poseidon alone? As they respond—perhaps with an even larger submarine missile force than now planned, or by developing mobile land-based missiles—we may be forced into still another round of strategic arms building. This may not occur. But its likelihood should not be completely discounted.

I have seen several arguments that say our current policy will not touch off a new round in the strategic arms race. I think they are dubious at best. One argument notes that the development of MIRVs and ABM is being made against a "greater-than-expected" threat—i.e., a Soviet threat larger than current intelligence estimates project. Hence, runs the argument, should the Soviets respond to our new developments, this response has already been taken into account in the "greater-than-expected" threat against which we are currently building. Consequently, we would not have to respond ourselves with a still further strategic arms buildup. But this misses the very nature of "greater-than-expected" threat planning. Once the Soviets proceed to deploy a force that approaches the *current* "greater-than-expected" threat, then by definition a *new* "greater-than-expected" threat is generated, and additional strategic arms expenditures are undertaken to meet it. This is the heart of the dynamics of a strategic arms race.

Another argument is often used to discount the mutual escalation threat posed by MIRVs. Multiple warheads, it is argued, make an effective large area ABM practically impossible to attain. Hence,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

deployment of MIRVs destroys the rationale for a large-scale, city defense, ABM. So long as MIRVs do not have the accuracy to destroy enemy missiles on the ground, this argument might indeed have some validity. But once they acquire hard-target killing capability—or the Soviets think they have such capability—they are no longer simply a means of penetrating ABM's and preserving a second-strike retaliatory force; they provide, in the eyes of the enemy, a first-strike capability, against which he must respond.

Given these various factors tending to drive up the cost of the non-Vietnam components of the military budget, by how much are annual defense expenditures, outside of Vietnam, likely to rise over the next five years? Obviously, there is no pat answer to this question. Any projection must be highly tentative. But assuming the increase in civilian and military pay mentioned earlier, calculating the annual costs of the approved weapons systems listed above, and allowing for only modest cost escalation in individual systems, it seems likely that on these three grounds alone non-Vietnam military expenditures by 1974 will be almost $20 billion higher than they were in fiscal 1969. *They would, in other words, almost fully absorb the savings realizable from a cessation of hostilities in Vietnam.* And this calculation leaves out of account the possibility of more than modest cost escalation, the adoption of large new systems like the AMSA, and a further round of strategic arms escalation. Let me make it clear, of course, that there is nothing inevitable about this projection of military expenditures. Some of the weapons systems I listed are in early stages of procurement. Other areas in the military budget can be analyzed, reviewed, and, if warranted, reduced as a budgetary offset to the new system. Hopefully, disarmament negotiations, if held quickly, may prevent mutual strategic escalation. My projection assumes that no changes in basic policies, postures, and force levels occur. The administration is currently conducting a major review of the nation's military posture and military budget. At the time of writing, it is too early to tell whether the results of this review will significantly reduce the increase in non-Vietnam military expenditures projected above.

Beginning with an additional $70 billion in federal revenues over the next five years, plus a $20 billion saving from a ceasefire in Vietnam, we calculated a $90 billion gross increase in federal budgetary resources. From this we subtracted the $35 billion growth of "built-in" civilian expenditures, and now we must further subtract a $20 billion rise in non-Vietnam military outlays, leaving a net fiscal dividend in fiscal 1974 of something in the order of $35 billion, available for discretionary use in meeting high priority public needs or additional tax cuts. That $35 billion, in turn, is itself subject to further reduction should major new weapons systems be approved or should another round in the strategic arms race take place.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Major program proposals and tax legislation already before the Congress will absorb a substantial fraction of the $35 billion fiscal dividend projected for fiscal 1974.

- President Nixon's new welfare program would add about $5 billion in costs to the fiscal 1974 budget. This is probably a conservative estimate.
- The Administration's proposal for revenue-sharing with state and local governments would cost $3.2 billion in 1974.
- The proposed urban mass transit subsidies would add $ .5 billion to the budget by 1974.
- Taking into account the growth of income between now and fiscal 1974, the tax "reform" bill passed by the House would *reduce* revenues by $4.5 billion in that year. The Senate will undoubtedly change the House bill substantially, but at the moment it seems unlikely that the revenue loss will be any less.
- In 1967 scheduled reductions in excise taxes on automobiles and telephone service were temporarily postponed as one means of financing the Vietnam war. It is quite likely that these tax reductions will go into effect once the war is over. This would reduce revenues by another $3 billion in fiscal 1974.

Altogether the program proposals and tax reductions already being considered amount to over $16 billion, in terms of their impact on the 1974 budget. Almost half of the potential fiscal dividend of $35 billion would be absorbed, leaving less than $20 billion available for *any* program expansion or other new programs over the next four years. Moreover, it seems fairly clear that little, if any, of the remaining fiscal dividend will be available in the next two years—most of the dividend would show up only in 1973 and 1974.

Why military budgets grow

The budget projection summarized above discusses some of the specific weapons systems that are likely to cause the defense budget to expand sharply in the next five years, but it does not address itself to the underlying forces that threaten to produce this outcome. In the first half of the 1960's the military budget ran at about $50 billion per year. With those funds strategic and conventional forces were not only maintained, but were sharply improved in both quantity and quality. Both land- and sea-based missile forces were rapidly increased. Similarly dramatic increases in the general purpose forces were undertaken. Fourteen undermanned Army divisions, trained primarily for tactical nuclear war, and short of combat consumables were expanded to over 16⅓ divisions, most of them fully manned. Equipment and logistic supply lines were sharply increased. The 16 tactical air wings were expanded to 21. Sea-lift and air-lift capability were radically improved.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In short, on $50 billion per year in the early 1960's, it appeared to be possible to buy not only the maintenance of a given military capability, but a sharp increase in that capability. By 1974, taking into account general price inflation in the economy plus military and civilian pay increases, it would take $66-$68 billion to maintain the same purchasing power as $50 billion in 1965. Yet, the non-Vietnam military budget is likely to approach $80 billion by fiscal 1974—$12 to $14 billion more than the amount needed to duplicate the general purchasing power the pre-Vietnam budget had—a budget that already was providing significant increases in military strength. Why this escalation? What forces are at work?

While there are a number of reasons for this increase, I would suggest that four are particularly important.

First, the impact of modern technology on the strategic nuclear forces. During most of the 1960's the primary goal of our strategic nuclear forces was the preservation of an "assured destruction capacity" (the ability to absorb an enemy's first strike and retaliate devastatingly on his homeland). In turn, this capability provided nuclear deterrence against a potential aggressor. In general, this could be described as a stable situation, partly as the result of the technology itself. To mount a first strike, an aggressor would have to be assured that he could knock out all, or substantially all, of his opponent's missiles. Because missiles did not have 100 per cent reliability and accuracy for this task, more than one attacking missile would have to be targeted on each enemy missile. For every missile added by the "defender," the attacker would have to add more than one. Hence, it was easy to show that first-strike capability could not be attained, because the opposing side could counter and maintain his second-strike capability at a less-than-equal cost. And, of course, the existence of mobile submarine-launched missiles made the stability of the system even greater.

But the development of MIRVs and, more critically, the development of guidance systems that are designed to make them accurate enough to "kill" enemy missiles on the ground changes this balance. Now a single attacking missile, with multiple warheads, can theoretically take out several enemy missiles. The advantage to the first attacker rises sharply. Strategic planners on both sides, projecting these developments into the future, react sharply in terms of the danger they perceive their own forces to be facing. Add to this the development of ABM which, however initially deployed, raises fears in the minds of enemy planners that it can be extended to protect cities against his submarine-launched missiles, and escalation of the strategic arms race becomes increasingly likely.

The impact of changing technology on strategic arms budgets, therefore, is one of the driving forces that changes the prospects of post-Vietnam military expenditures.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The second major factor in driving arms budgets up is the propensity of military planners to prepare against almost every conceivable contingency or risk. And this applies both to force level planning and to the design of individual weapons systems. Forces are built to cover possible, but very remote, contingencies. Individual weapons systems are crowded with electronic equipment and built with capabilities for dealing with a very wide range of possible situations, including some highly unlikely ones.

If military technology were standing still, this propensity to cover remote contingencies might lead to a large military budget, but not to a rapidly expanding one. As technology continually advances, however, two developments occur: (1) as we learn about new technology, we project it forward into the Soviet arsenal, thereby creating new potential contingencies to be covered by our own forces; (2) the new technology raises the possibility of designing weapons systems to guard against contingencies that it had not been possible to protect against previously.

Continually advancing technology and the risk aversion of military planners, therefore, combine to produce ever more complex and expensive weapons systems and ever more contingencies to guard against.

Contingency planning

According to Dr. John S. Foster, Jr., Deputy Director of Defense Research and Engineering in testimony before the Senate Armed Services Committee last year, the Poseidon missile system was originally designed to penetrate the Soviet TALLINN system—a system originally thought to be a widespread ABM defense. When this system turned out to be an antiaircraft system, the deployment decision on the Poseidon was not revised. Rather it was continued as a hedge against a number of other possible Soviet developments, including in Dr. Foster's words the possibility that "the Minuteman force could be threatened by either rapid deployment of the current Soviet SS-9 or by MIRVing their existing missiles and improving accuracy."

Once the Soviets began to deploy the SS-9 in apparently larger numbers than earlier estimated, however, this gave rise to the decision to deploy a "Safeguard" ABM defense of Minuteman sites.

In short the sequence went like this: (1) The Poseidon deployment decision was made against a threat that never materialized; (2) despite the disappearance of the threat against which it was designed, the Poseidon was continued, presumably as a hedge against other potential threats, including faster-than-expected Soviet deployment of the SS-9; (3) but now a decision has been made to hedge against the SS-9 by building a "hard-point" ABM—so we are

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

presumably building the Poseidon as a hedge against a number of possible Soviet threats, including the SS-9, and then building a hedge on top of that; (4) finally, new technology has made it possible to design a hard target killing accuracy into the Poseidon—an accuracy not needed to preserve our second strike capability against either the SS-9 or a Soviet ABM. The technology is available—why not use it? Yet the existence of that capability may well force a major Soviet response.

Another example of hedging against remote threats is the currently planned program of improvements in our continental air defense system. The existing SAGE system cost $18 billion to install but is apparently not very effective against low-altitude bomber attack. Although the Soviets have no sizable intercontinental bomber threat, the decision has been made to go ahead with major investments in a new air defense system. The major reasons given for this decision are these: to deter the Soviets from deciding to reverse their long-standing policy and develop a new bomber; to guard against one-way Kamikaze-type attacks by Soviet medium-range bombers; and to protect those of our missiles that would be withheld in a retaliatory strike. There is admittedly no direct threat to be covered. But a number of remote threats are covered. Because we cannot defend our cities against Soviet missiles, it gives small comfort to have them protected against as yet nonexisting bombers or Kamikaze attacks.

Another case in point is the new F-14 Navy aircraft. Both the F-111B and its successor, the initial version of the F-14, were designed to stand off from the carrier fleet and, with the complex Phoenix air-to-air missile, defend the fleet from a Soviet supersonic bomber plus missile threat, in the context of a major Soviet attack against our carrier forces. But as the Senate Defense Preparedness Subcommittee noted last year, this threat is "either limited or does not exist." Or as Chairman Mahon of the House Appropriations Committee noted, "The bomber threat against the fleet, as you know, has been predicted by Navy officials for some time. It has not, of course, developed to date."

The problem of which contingencies and risks are to be guarded against goes to the heart of priority analysis. Primarily what we buy in the military budget is an attempt to protect the nation and its vital interests abroad from the danger and risks posed by hostile forces. We seek either to deter the hostile force from ever undertaking the particular action or, if worst comes to worst, to ward off the action when it does occur. Similarly, in designing particular weapons systems, the degree of complexity and the performance requirements built into the systems depends in part on an evaluation of the various kinds of contingencies which the weapon is expected to face. Now there are almost an unlimited number of "threats" that can be

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

conceived. The likelihood of their occurrence, however, ranges from a significant possibility to a very remote contingency. Moreover, the size of the forces and complexity of the weapons systems needed to guard against a particular set of threats depends upon whether the threats materialize simultaneously or not. If they do not occur simultaneously, then very often forces developed to meet one contingency can be deployed against another. But the probability of two or more remote contingencies occurring simultaneously is obviously much lower than either taken separately.

Clearly we cannot prepare against every conceivable contingency. Even with a defense budget twice the present $80 billion, we could not do that. The real question of priorities involves the balance to be struck between attempting to buy protection against the more remote contingencies and using those funds for domestic purposes. In any given case, this is not a judgment that can be assisted by drawing up dogmatic rules in advance. Because it is a question of balancing priorities, it is not a question that can be answered solely on military grounds or with military expertise alone, although such expertise must form an essential component of the decision process.

In my judgment we generally have tended in the postwar period to tip the balance too strongly in favor of spending large sums in attempting to cover a wide range of remote contingencies. This tendency, combined with the relentless ability of modern technology to create new contingencies and new systems to combat them, threatens to produce sizable increases in the defense budget.

Inflation and unexamined decisions

A third important factor that is responsible for driving up the size of defense budgets is "modernization inflation."[2] The weapons systems we now buy are vastly more costly than those we bought 10 or 20 years ago. The F-111A and F-14A, for example, will cost 20 to 30 times what a tactical aircraft cost at the time of Korea. A small part of this increase is due to general inflation. But by far the largest part is due to the growing complexity and advanced performance of the weapons. In the case of tactical aircraft, speed, range, bombload, accuracy of fire, loiter time, ability to locate targets, and other characteristics are many times greater than models one or two decades older. The same kinds of performance comparison can be drawn between modern missile destroyers and their older counterparts, and between modern carriers and their predecessors. We pay sharply increased costs to obtain sharply increased performance. Yet seldom, if ever, is this advance in "quality" used to justify a *reduction* in the *number* of planes or carriers or destroyers or tanks. If bomb carrying

[2]This is the term used by Malcolm Hoag.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

capacity and lethal effectiveness is doubled or tripled, then presumably a smaller number of new planes can do the same job as a larger number of old planes. But the numbers generally stay the same or increase. As a consequence, modernization inflation causes a net increase in military budgets rather than providing, even partially, a reasoned basis for reducing the level of forces and yet maintaining military effectiveness.

In some cases, of course—for example, Soviet fighter aircraft—rising enemy capabilities may reduce the possibility of substituting quality for quantity. But the same kind of argument is hard to adduce for such weapons as carriers or attack bombers.

The fourth, and perhaps most important, reason for the increasing military budget is the fact that some of the most fundamental decisions that determine their size are seldom subjected to outside review and only occasionally discussed and debated in the public arena. This problem is most acute in the case of the budget for the nation's general purpose forces. The fundamental assumptions and objectives of the strategic nuclear forces are more generally known and debated. But the assumptions, objectives and concepts underlying the general purpose forces (which even in peacetime take up 60 per cent of the defense budget) are scarcely known or discussed by the Congress and the public. Congress does examine and debate the effectiveness and the wisdom of particular weapons systems (the TFX, the C-5A, etc.). But choices of weapons systems form only a part of the complex of decisions that determine the budget for our general purpose forces. Those decisions can only be reached after consideration of essential questions.

1. What are the nation's *commitments* around the world? Although our strategic nuclear forces are primarily designed to deter a direct attack on the United States, our general purpose forces are intended to protect American interests in other parts of the world. At the present time, we have commitments of one kind or another to help defend more than 40 nations, 19 of which are on the periphery of the Soviet-Eastern European bloc and Communist China. Most of these commitments were made some time ago, but remain in force. Unless we wish to rely solely on "massive retaliation" to fulfill these commitments, they pose a fundamental "raison d'etre" for general purpose forces of some size.

2. Granted the existence of these commitments, against what sort of *contingencies* or *threats* do we build our peacetime forces? A number of examples will help illustrate this aspect of decision making:

- Pre-Vietnam, our general purpose forces were built to fight *simultaneously* a NATO war, a Red Chinese attack in Southeast Asia, and to handle a minor problem in the Western Hemisphere, à la the Dominican Republic. (This is often referred to as the "two-and-a-half war" assumption.) Obviously the forces-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in-being would not be sufficient, without further mobilization, to complete each of these tasks. But they were planned to handle simultaneously all of the three threats long enough to enable mobilization to take place if that should prove necessary.

- The Navy is designed, among other tasks, to be capable of handling an all-out, nonnuclear, protracted war at sea with the Soviet Union.

The incremental costs of maintaining a force to meet the Chinese attack contingency amount to well over $5 billion per year. When in 1965 the nation decided to begin federal aid to elementary and secondary education—which has subsequently been budgeted at less than $2 billion a year—a major national debate took place. To the best of my knowledge, there was no public comment or debate about the "Chinese contingency" decision. Yet the decision was not classified. It was publicly stated in the unclassified version of the Secretary of Defense's annual posture statement several years running. This is not to say that the decision was necessarily wrong, but I want to stress that it has a major impact on the defense budget and was not, so far as I know, debated or discussed by the Congress. This lack of debate cannot be laid at the door of the Pentagon because the information was made available in the defense posture statement.

3. Granted the commitments and contingencies, what *force levels* are needed to meet those contingencies, and how are they to be based and deployed?

- The Navy, for example, has 15 attack carrier task forces. The carrier forces are designed not merely to provide quick response, surge capability for air power, but to remain continually on station during a conflict. As a consequence, because of rotation, overhaul, crew-leave, and other considerations, one carrier on station generally requires two off-station as back-up. Thus for *five* carriers on station, we have *ten* back-up carriers. (The "on-station" to "back-up" ratio depends on the distance of the station from the carriers' base. The 2/1 is an average ratio.)
- The pre-Vietnam Army comprised 16⅔ active divisions with eight ready reserve divisions. The 16⅔ division force is supported by a planned 23 tactical air wing (only 21 were in-being pre-Vietnam).
- The Navy has eight antisubmarine carrier task forces.
- Defense plans call for a fast amphibious assault capability, sufficient to land one division/air wing in the Pacific and ⅔ division/air wing in the Atlantic.

The force levels needed to meet our contingencies are, of course, significantly affected by the military decisions and capabilities of our allies. Our situation in NATO, for example, is strongly affected by whether or not the divisions of our NATO allies are equipped

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

with the combat consumables and rapid fire-power weapons enabling them to conduct a prolonged conventional war.

4. With what *weapons systems* should the forces be equipped? Such questions as nuclear versus conventional power for carrier and carrier escorts, the F-111B versus the F-14, the extent to which the F-14 replaces all the Navy's F-4's, must, of course, be decided.

Weak links in the planning chain

Let me hasten to point out that there is no *inexorable logic* tying one set of decisions in this litany to another. Do not think that once a decision has been made on commitments, that the appropriate contingencies we must prepare against are obvious and need no outside review; or that once we have stipulated the contingencies, that the necessary force levels are automatically determined and can be left solely to the military for decision; or that once force levels are given, decisions about appropriate weapons systems can be dismissed as self-evident. There is a great deal of slippage and room for judgment and priority debate in the connection between any two steps in the process.

Some examples might help.

There is no magic relationship between the decision to build for a "2½ war" contingency (NATO war, Red Chinese attack, and Western Hemisphere trouble) and the fact that the Navy has 15 attack carrier task forces. In the Washington Naval Disarmament Treaty of 1921, the United States Navy was allotted 15 capital ships. All during the 1920's and 1930's the Navy had 15 battleships. Since 1951 (with temporary exception of a few years during the Korean war) it has had 15 attack carriers, the "modern" capital ship.[3] Missions and "contingencies" have changed sharply over the last 48 years. But this particular force level has not.

If one assumed, for example, that the Navy's carrier force should provide "surge" support to achieve quick air cover and tactical bombardment during an engagement and then turned the job over to the tactical Air Force, the two-to-one ratio of back-up carriers to on-station carriers would not have to be maintained and the total force level could be reduced, even with the same contingencies. The wisdom or lack of wisdom in such a change would depend both upon a host of technical factors and upon a priority decision—does the additional "continuation" capability as opposed to "surge" capability buy advantages worth the resources devoted to it, on the order of $300-$400 million per year in operating and replacement costs for each carrier task force.

---

[3] This observation is reported by Desmond P. Wilson in his Ph.D. dissertation at MIT entitled *Evolution of the Attack Aircraft Carrier: A Case Study in Technology and Strategy*.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The same kind of questions arise in other areas. Does the 16⅓ division army peacetime force need 23 tactical air wings for support, or could it operate with the Marines' one-to-one ratio between air wings and divisions? Granted the 15 carrier task forces, must all of their F-4's be replaced by F-14's, as the Navy is apparently planning.

In short there is a logical order of decisions—commitments to contingencies to force levels to weapons systems—but the links between them are by no means inflexible and require continuing review and oversight.

I am impressed by the fact that the Congress tends to concentrate primarily upon debate about weapons systems to the exclusion of the other important elements of the general purpose component of the defense budget. Many of the elements involved in military budget decision-making cannot, of course, be made subject to specific legislation—it is hard to see how the Congress could, or should, legislate the particular contingencies against which the peacetime forces should be built. But the Congress is the nation's principal forum in which public debate can be focused on the basic priorities and choices facing the country. It can, if the proper information is available and the proper institutional framework created, critically but responsibly examine and debate *all* of the basic assumptions and concepts that underlie the military budget. And it can do so in the context of comparing priorities. The Congress can explicitly discuss whether the particular risks that a billion dollar force level or weapons systems proposal are designed to cover are serious enough to outweigh the advantages of devoting that billion dollars to domestic needs. By so doing, the Congress as a whole can create the kind of understanding and political climate in which its own Armed Services and Appropriations Committees, the President, his Budget Bureau, and his Secretary of Defense can effectively review and control the military budget.

The M-I-C and budget review

The size and rapid increase in the defense budget is often blamed on the military-industrial complex (MIC). Sometimes it is also blamed on the fact that the Budget Bureau uses different procedures in reviewing the military budget than it does in the case of other agencies.

The uniformed Armed Services and large defense contractors clearly exist. Of necessity, they have views about and interests in military budget decisions. Yet I do not believe that the "problem" of military budgets is primarily attributable to the complex. If defense contractors were all as disinterested in enlarging sales as local transit magnates, if retired military officers all went into selling soap and TV sets instead of missiles, if the Washington offices of defense con-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tractors all were moved to the West Coast, if all this happened and nothing else, then I do not believe the military budget would be sharply lower than it now is. Primarily we have large military budgets because the American people, in the cold war environment of the 1950's and 1960's, have pretty much been willing to buy anything carrying the label *National Security Necessity*. The political climate has, until recently, been such that, on fundamental matters, it was exceedingly difficult to challenge military judgments, and still avoid the stigma of playing fast and loose with the national security.

This is not a reflection on military officers as such. As a group they are well above average in competence and dedication. But in the interests of a balanced view of national priorities we need to get ourselves into a position where political leaders can view the expert recommendations of the military with the same independent judgment, decent respect, and healthy skepticism that they view the budgetary recommendations of such other experts as the Commissioner of Education, the Surgeon General, and the Federal Manpower Administrator.

The same approach can be taken with respect to the procedures used by the Budget Bureau to review the Defense Department budget. In all other cases, agency budget requests were submitted to the bureau, which reviewed the budgets and then made its own recommendations to the president subject to appeal by the agency head to the president. In the case of the defense budget, the staff of the Budget Bureau and the staff of the Secretary of Defense jointly reviewed the budget requests of the individual armed services. The staffs made recommendations to their respective superiors. The Secretary of Defense and the Budget Director then met to iron out differences of view. The Secretary of Defense then submitted his budget request to the President, and the Budget Director had the right of carrying to the President any remaining areas of disagreement he thought warranted presidential review.

Given the complexity of the defense budget and a Secretary of Defense with a genuine interest in economy, efficiency, and effectiveness, this procedure had many advantages. It probably tended to provide the Budget Director with better information on the program issues than he got from other departments. The procedure might perhaps be strengthened if the practice were instituted of having the Budget Director and the Secretary of Defense *jointly* submit the budget recommendations to the President, noting any differences of view. President Nixon has, as a matter of fact, changed the budget procedure to make the review of the military budget by the Budget Bureau more nearly comparable to its review of civilian agency budgets.

But essentially, this procedural matter is of relatively modest importance. The Budget Bureau can effectively dig into and review

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

what the President wants it to review under this procedure or many others. It can raise questions of budgetary priorities—questioning, for example, the worth of building forces against a particular set of contingencies on grounds of higher priority domestic needs—when and only when the President feels that *he* can effectively question military judgments on those grounds.

Therefore, the issues of the military-industrial complex and of budget review procedures are important. But they are far less important than the basic issue of public attitudes, public understanding, and the need to generate an informed discussion about the fundamentals of the military budget in the context of national priorities.

Tentative proposals for improving military budget decisions

With this in mind, let me suggest a few tentative proposals for improving public understanding and putting the military budget in a priorities framework. These proposals are addressed primarily to the Congress. Although many of the basic assumptions and concepts that determine the size of the military budget do not lend themselves, in the first instance, to direct legislative actions, the Congress has another historic function—to focus public understanding and debate on important national concerns as a means of creating the framework within which both the Congress and the President can take the necessary specific actions. It is to this second function that these proposals are addressed.

Each year for the last eight years the Secretary of Defense has submitted to the Congress an annual *posture statement*, which contains a wealth of information and analysis and lays out most of the basic assumptions and concepts on which the military budget request is based. But, one of the most fundamental determinants of the military budget, particularly the general purpose forces, is the set of overseas commitments in which we have undertaken to defend other nations. Yet the Secretary of State submits no annual posture statement covering his area of responsibility and concern. Because of this lack of a State Department posture statement, the Defense posture statement each year has devoted its lengthy opening sections to a review of the foreign policy situation.

Recommendation 1. The Secretary of State should submit to the Congress each year a posture statement. This statement should, at a minimum, outline the overseas commitments of the United States, review their contribution or lack of contribution to the nation's vital interests, indicate how these commitments are being affected and are likely to be affected by developments in the international situation, and relate these commitments and interests to the military posture of the United States.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Defense posture statement itself could be much more useful to the Congress and the nation if two important sets of additional information were supplied.

Recommendation 2. The Defense posture statement should incorporate a five-year projection of the future expenditure consequences of current and proposed military force levels, weapons procurement, etc. This need not, and should not, be an attempt to forecast *future* decisions. But it should contain, in effect, the five-year budgetary consequences of past decisions and of those proposed in the current budget request. And not only should this sum be given in total, but it should be broken into meaningful components.

One of the major problems in priority analysis is the fact that the first year's expenditures on the procurement of new weapons systems is very small. Hence it is quite possible in any one year for the Congress to authorize and appropriate, in sum, a relatively small amount for several new systems which, two to five years in the future, use up a very large amount of budgetary resources.

All sorts of technical details need to be worked out if this proposal is to be useful. What is a "decision" about a weapons system? The Defense Department plans, for example, call for three nuclear carriers to be built. Procurement funds have been requested for only two so far. Should the cost of the third be included in the projection? But with a little goodwill on both sides, these questions could be ironed out. Let me also note that I am aware that the Congress, relying on past experience with cost escalation, may want to increase the official projections of many weapons systems costs in order to get a more accurate idea of the overall total.

Recommendation 3. The Defense posture statement should include more cost data on relevant components of forces and weapons systems. What is the annual cost of the forces we maintain in peacetime against the contingency of a Chinese attack in Southeast Asia? What is the systems cost of constructing and operating a naval attack carrier task force? What is the cost of buying and maintaining one tactical air-wing? What is the annual cost of operating each of the Navy's eight anti-submarine warfare carriers? These are precisely the kinds of information needed to make possible a rational and responsible debate about the military budget in the context of national priorities.

Given this information, it seems to me that the Congress could organize itself to use it effectively. To that end, very tentatively I make additional recommendations.

Recommendation 4. An appropriate institution should be created within the Congress to review and analyze the two posture statements in the context of broad national priorities, and an annual report on the two statements should be issued by the Congress.

I use the peculiar terms "an appropriate institution" because I am

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

not familiar enough with either Congressional practices or Congressional politics to specify its title more closely. Whether this institution should be a new Joint Committee, an existing Joint Committee, a Select Committee, an *ad hoc* merging of several Committees, or some other form, I do not know. But I can specify what I believe should be the characteristics of such an institution:

- it should review the basic factors on which the military budget is based, in the context of a long-term projection of budgetary resources and national priorities.
- it should have, as one part of its membership, Senators and Congressmen chiefly concerned with domestic affairs to assert the claims of domestic needs.
- it should not concern itself primarily with the technical details of weapons systems, procurement practices and the like; while these are very important, they are the province of other Committees. It is the "national priorities" of the military budget which should be the essence of the new institution's charter.
- above all, it should have a top flight, highly qualified staff. The matters involved do require final solution by the judgment of political leaders, but in the complex areas with which the new institution would deal, its deliberations must be supported by outstanding, full-time, professional staff work.

The institution I have described would have no legislative responsibilities. But that does not make it any less important. After all, the Joint Economic Committee has no legislative mandate, and yet in the past twenty-two years, its activities have immeasurably increased the quality and sophistication of public debate and of Congressional actions on matters of economic affairs and fiscal policy. Should such an institution as I have proposed be created, perhaps twenty-two years from now it might look back on an equally productive life.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The blindness system

DONALD A. SCHON

As we have become more concerned with the adequacy of our social services—particularly those affecting the poor, the disabled, and the neglected—we have begun to learn not only how hard it is to change inadequate service systems but also how difficult it can be to understand them in the first place. One cluster of approaches to such understanding and such change is that of systems analysis. In these pages, my purpose will be to explore some of the insights one form of systems analysis offers into the complex of institutions which provide services to the blind in the United States.

There exists in this country a "blindness system." By blindness system I mean that interrelated network of people, organizations, rules, and activities which includes: *(1) all persons with severe visual impairments; (2) all agencies and groups that serve these people; (3) the training and research that affect these services; (4) the laws*

This article is based on a year-long study of services to the blind in the United States which was undertaken by the Organization for Social and Technical Innovation in Cambridge, Massachusetts (OSTI) under the sponsorship of the National Institute of Neurological Diseases and Blindness. The NINDB is not responsible for the findings and interpretations here.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and policies under which services are provided. To call all this a system is not to imply that it has well-defined, agreed-upon goals and coordinated programs for reaching them. In fact, the complex of institutions is fragmented and tends to behave in a disorganized way. In this sense, it is a *non*system. Nevertheless, all the components listed above affect the experience of the American blind, and we can profit from an examination of the actual *non*system from the point of view of an ideal hypothetical system which *would* arrange its activities and allocate its resources in order to meet its goals in a coordinated way.[1]

Chart I suggests something of the makeup of the actual blindness system in the United States. It estimates the total allocation of dollars to blindness as of 1966 (about $446 million), and indicates the relative contributions to that sum from federal, state, and private sources. It also shows the principal services offered by agencies for the blind. The chart presents the blindness system as a kind of mechanism through which dollars flow from federal, state, and private sources into a variety of service activities which are "matched," in turn, with different categories of blind persons.

Agencies specifically concerned with the blind exist at the federal, state, and local levels. They fall into two parallel systems, one public and the other private—although the clarity of this distinction has been eroded in recent years as private agencies have sought and received greater amounts of public funds. *There are, in all, approximately 800 agencies for the blind,* both public and private. These differ with respect to the services they provide and the basis on which they are organized. Some are specialized in individual functions, such as Aid to the Needy Blind or residential schools for the blind. Others are large, multifunctional agencies. Still others are consulting agencies or producers and distributors of materials for the blind. In addition to the providers of services, there are special organizations concerned with blindness-related research, both medical and nonmedical, and with manpower training. All these constitute what I will call the *official* blindness system, which provides services specifically to the blind.

Beyond that there is an *indirect* system which provides benefits or services to the blind under headings other than blindness, such as welfare, social security, veterans' benefits, and health. The magnitude of this indirect system is substantial. Conservative estimates of the cost of medical and personal care provided to blind persons in general hospitals and nursing homes in 1966 exceed $200 million.

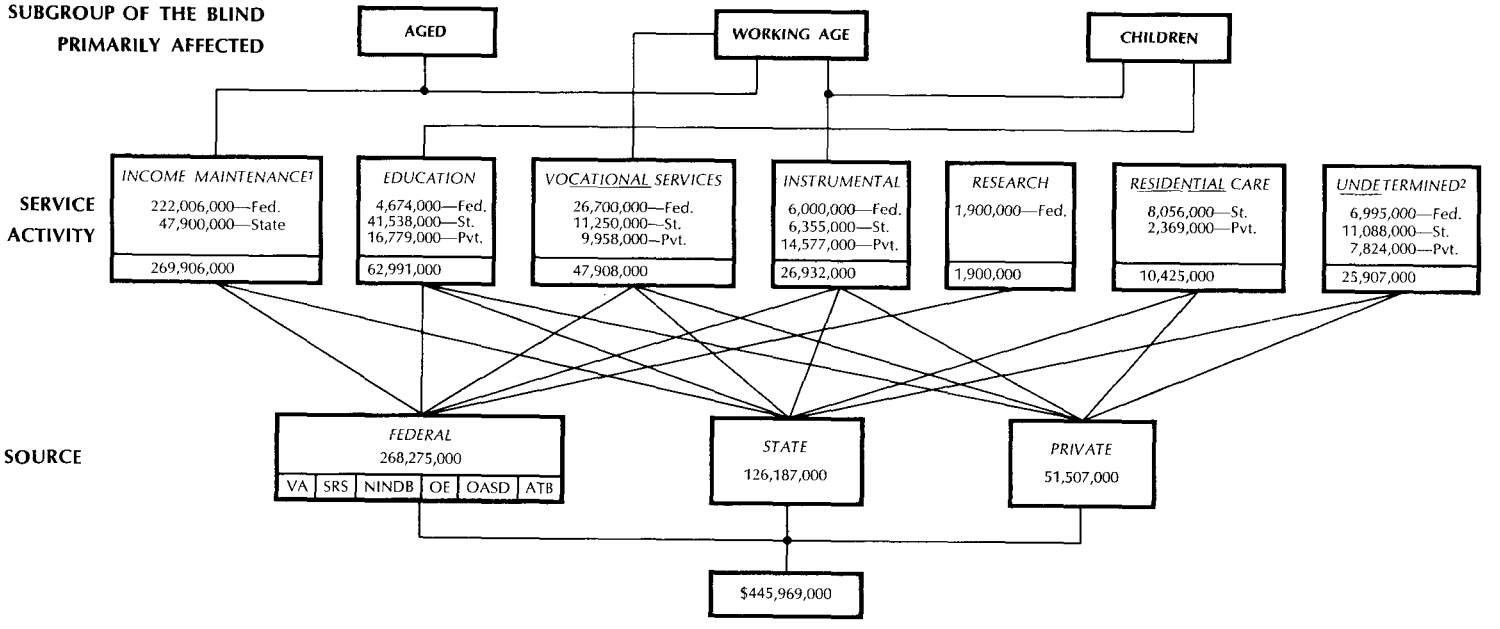
And finally there is an *informal* blindness system, which consists of services to the blind provided not by established agencies, but

[1] Robert A. Scott's recent study, *The Making of Blind Men,* (NY: Russell Sage Foundation, 1969) is a penetrating analysis of the "blindness system," and I should like to take this opportunity to acknowledge my indebtedness to it.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

CHART 1

National resource flows related to blindness



[1]This figure includes 118,130,000 of Veterans Administration funds which are allocated on the basis of visual impairment and are not limited to legal blindness.
[2]This category includes funds which could not be assigned with confidence to any other service category.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

by families, friends, and neighborhood acquaintances. We have attempted no estimate of the dollar value of these services, but their magnitude—for reasons to be suggested later—may well exceed the entire agency system concerned with the blind.

The problem of data

The available data concerning blindness in the United States are exceedingly poor—so poor, in fact, that no significant quantitative statement about the system can be made with any high degree of certainty. Consider, for example, the central question of how many blind people there are. At the present time, there are three principal estimates:

Source	Rate per 1000 population	Total United States
MRA Projection to Total (1965)	1.5	290,000
NSPB Fact Book (1965)	2.1	416,000
National Health Survey	5.6	1,090,000

Of the three estimates, the highest is more than 3 times the lowest. These wide variations exist because different agencies use different definitions of blindness, different test methods, and different sampling procedures.[2]

The Model Reporting Areas (MRA) are 14 associated states which maintain registers of persons with severe vision impairment. They define blindness as "visual acuity of 20/200, if the widest diameter of the field of vision subtends an angle no greater than 20°." This is a variant of the standard accepted definition of "legal blindness." The MRA reporting system requires that persons be listed as blind by an ophthalmologist using the standard Snellen charts.[3] There

[2] In my experience, such a state of the data is the norm rather than the exception. That is, the situation with respect to data on blindness does not seem very different from that of other social or medical problems. The statistics on crime, for example, or on the disabilities of children, or on the numbers of the mentally ill are similarly divergent, vague, and fragmentary. In each such instance, the data often say more about the reporting systems than about the problems reported. Police Commissioner Leary, for example, is said to have doubled the crime rate of New York City in one year by enforcing a more stringent reporting of crimes. The state of Kansas was able to "increase" the turnover rate in its mental hospitals by confining old patients to facilities classified as geriatric rather than as hospitals for the mentally ill.

[3] Even when the standard Snellen charts are used, serious questions of methodology arise. The Snellen chart lacks fine graduations between 20/100 and 20/200, yet this range is the most critical from the standpoint of classification. (Anyone whose visual acuity is less than 20/100 gets tested next at 20/200.) Moreover, the Snellen chart measures only distance vision; it does not test near vision, which is a better criterion of visual ability. It also does not measure other components of visual performance, such as uniformity of field. Taken by itself, the Snellen chart indicates mainly the ability to read a Snellen chart: it does not indicate whether the subject has useful travel vision, reading vision, or other visual capabilities.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is reason to believe, however, that ophthalmologists underreport blindness: first, by failing to report as blind persons (often relatively well-to-do) who wish to avoid the stigma of blindness; and second, because many poor and black persons who are legally blind never go to an ophthalmologist.

The second estimate—that in the Fact Book of the National Society for the Prevention of Blindness (NSPB)—is based on an extrapolation from state demographic data using arbitrary weighting factors tied to the number of people in the blindness register in the state of North Carolina.

The National Health Survey derives its data from household interviews with a sample of the civilian noninstitutionalized population of the United States. It employs no test of visual acuity and classifies persons into groups of severe visual impairment according to the respondent's reply.

Nevertheless, the data concerning the numbers of the blind are actually rather better than those concerning the effect or cost of services provided to the blind, or the number of blind persons receiving benefits from agencies not considered blindness agencies. Some of this information is literally impossible to obtain because of the organization, format, or confidentiality of agency reporting systems. This is another reason why it is difficult to describe, much less evaluate, the blindness system.

A conspiratorial mind might construe this state of affairs as a defense mechanism adopted by the *non*system as a safeguard against unwanted inquiry or change. More likely, it is merely a result of the fragmentary and disorganized character of the system; but the effect is the same as if the system wished to protect itself from scrutiny.

The mismatch of services and clients

There has been, since the turn of the century, a significant change in the makeup of those people identified as blind. In the period between 1900 and the 1930's, the blind were identified primarily as children and adults of working age. The dominant causes of blindness were war, industrial accident, and disease, and the blind were likely to have only the single handicap of blindness. During the 1930's, federal and state aid to the blind came into being on a significant scale, carried along on the wave of New Deal social legislation. This period of change saw the establishment of certain major programs for the blind. *The sheltered workshop,* publicly or privately supported, trained blind adults for occupations thought to be particularly appropriate to the blind—piano tuner, for example, or broom maker, or vending stand operator. *The school for the blind* provided separate track, physically segregated education for the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

blind child. And in the early 1940's, state *vocational legislation* promoted rehabilitation for adults of working age. All such programs treated fitness for work and economic independence through employment as the central tests of rehabilitation.

Today, the makeup of the blind has changed. The population of the severely visually impaired in the United States is now heavily weighted toward (1) the aged blind; (2) the multiple-handicapped, especially among children; (3) the poor ethnic minorities, especially the low-skilled; (4) those with significant residual vision. All sources indicate that a high percentage of the blind are persons over 65, although the estimates vary from 40 per cent (MRA) to 65 per cent (NHS, which uses a broader, functional definition of blindness). The dominant causes of blindness today are senile degeneration, diabetes, and other multiple etiologies characteristic of old age and, among children, genetic and prenatal influences which tend to be associated with other disabilities in addition to blindness. The overall pattern, both for the aged and for children, is one of multiple disability. Projections of the prevalence of blindness and the makeup of the blind to 1970 and 1985 suggest that, with the increase in the numbers of persons over 65, these trends will continue.

These developments mean that, for an increasing majority of the blind, economic employment is an unrealistic goal. *Nevertheless, agencies for the blind continue to behave as though this shift in the blind population had not taken place.* In the selection of clients and the provision of services, their programs are oriented to work or to education leading to work. They measure the success of their services in terms of their clients' achievement of some measure of economic independence. Only a small number of significant exceptions to this general pattern exist within the blindness system.

At the time of its inception, each of these work-oriented programs represented a significant innovation in what was considered humane treatment for the blind. Yet each has tended to become established and frozen in place as an aspect of the way services to the blind "must" operate. Thus, the blindness system today is an array of agencies and services dating from different periods, based on different assumptions concerning the character of the blind population, pursuing different goals, and using different technologies. The effect is rather like complex geological strata in which substances of widely varying origins and characters exist side by side.

The result is that the official blindness system provides services to only a relatively small fraction of those who are actually blind and eligible for assistance. Since the services offered are largely education, rehabilitation, and care, *only about 20 per cent of the total blind population are actually being served today.* In general, these 20 per cent are either children with the single handicap of blindness or adults of working age and potential for employment. The 80 per

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cent who receive no services tend to be those without apparent potential for employment or educational advancement: the aged, the multiple-handicapped, the poor, and the low-skilled. Such persons are shunted off to other systems which provide minimal income-maintenance or custodial care, or are ignored. A substantial portion of the 80 per cent may receive some form of support from the informal system of family, friends, and community.[4]

Why have the design and mix of official services been so unresponsive to changes in the needs and capacities of the blind? The answer is that, for good bureaucratic reasons, agencies tend to behave as if they believed that the blind need, or should have, *the services which happen to be offered by the agencies* rather than that agencies should modify services in response to changing characteristics of the blind population. This is true both of the kinds of services offered and of the methods or techniques by which such services are delivered. To be sure, there are exceptions. But in the case of services designed specifically for the "newer" categories of the blind, the exceptions do not exceed three agencies in each category. And even in the case of services designed for more traditional categories of the blind—mobility training, comprehensive rehabilitation, or training in the use of low vision aids—only a few agencies have shown themselves to be innovative in any significant degree. Taken together, these exceptional, change-oriented agencies constitute only a tiny fraction of the entire official blindness system. The overwhelming pattern remains firmly based on the assumption that "the blind" are employable adults, children with the single handicap of blindness, and the totally blind. The shifting population of the blind has falsified that assumption, yet the pattern of programs remains.

Strategies, constraints

Why does this blindness system behave in such a fashion? One important factor is to be found in the purposes of the organizations and individuals who serve the blind. Now, because the system is in reality a *non*system, there is no group or institution capable of setting a common objective for all elements of the blindness system. Nevertheless, it is clear from the statements of participants and observers that there are three main objectives which enjoy widespread currency, in practice or in rhetoric, within the blindness system:

(1) Minimize the cost to the blindness system of providing services to the blind. This is the principle of "least cost to the system itself."

(2) Minimize the cost to the nation of providing services.

(3) Optimize human functioning for the blind. This objective, frequently voiced by professionals within the system, focuses on

[4] See the study conducted by the Bureau of Labor Statistics for the American Foundation for the Blind, "National Survey of Personnel Standards and Personnel Practices and Services for the Blind—1955."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

what services may enable the blind to *do* or *become,* rather than the economic criteria of performance.

Each of these objectives implies a different strategy for allocating resources and defining configurations of service and coverage.

Least cost to the blindness system. If it were to operate under this principle alone, the blindness system would provide services only to those blind people who are likely to be able to enter the labor force. This way, the system encounters only those who can be trained to leave the blindness system quickly, thereby maximizing turnover rates and minimizing the cost to the blindness system. Hence, the system would select children with the single handicap of blindness and adults of working age and would provide them with education and instrumental and vocational services. The others—multiple handicapped children, adults over 44, etc.—it would either shunt off to other systems or provide with minimal care or maintenance.

Least cost to the nation. Under this principle, the system would operate much as it does under the first principle. The main difference is that, under this second objective, it would be far less selective in providing educational, instrumental, or vocational services. The cumulative costs of income maintenance or custodial care are so great that it is cost-effective to give job-oriented services to all individuals for whom there is *any* finite chance that they will be able to leave the system. The first objective, which does not require the blindness system to bear the costs of long-term maintenance or support of those blind who are unable to work, provides the system with no incentive to behave this way.

Here, the analysis touches on a peculiar and interesting feature of the blindness system. *Those who must decide whether or not to provide services to an individual are institutionally separated from those who stand the cost and trouble of long-term maintenance and care.* The current system's fragmentation removes the incentive to provide services so as to avoid later maintenance and care.

Optimize human functioning. This objective implies that, even if there is no possibility of his gaining economic independence, it is worth devoting resources to a blind person in order to make him function somewhat more independently. This means, in other words, that an additional benefit—personal independence—counts in offsetting costs incurred in the system. The consequence of such an objective, of course, is to increase the cost of operating the system. In 1966, for example, an additional $1 billion (on a base of about $446 million) would have been needed for a blindness system which attempted to maximize human functioning. A very large portion of that increase would have gone for services to the aged.[5]

In terms of these three models, the current blindness system is a

[5] Although the money costs of this third system are important, the problem of manpower resources constitutes an even more powerful constraint. It is esti-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

hybrid. With respect to the way in which it determines what categories of the blind shall receive services, it functions according to the principle of the least cost to the system itself. Those blind without high potential for gainful employment are either ignored or shunted off to other systems (such as welfare, veterans' care, etc.). But with respect to those whom it *does* select for training or care, the blindness system tends to behave as if its purpose were to optimize their human functioning. Its expenditures on the blind it chooses to encounter are high.

The agency as a homeostatic system

It is remarkable that the network of blindness agencies has been able to keep its traditional modes of operation intact. That it has done so is not the result of any conscious or systematic policy. Rather, little change has occurred because the structure of the system itself affects the way in which individual agencies set their goals and allocate their resources.

The blindness system is horizontally and vertically fragmented. Public and private agencies tend to be cut off from one another, and even the major public agencies function separately. There is discontinuity among national, state, and local levels. Public laws, jurisdictional rules, agency policies, and provisions governing the use of private dollars—all these tend to lock service units into artificial boundaries and prevent the system from modifying its behavior in face of changing client demand. Moreover, the system's isolation from other service systems—health or welfare, for example—makes it difficult to cut across system boundaries in order to insure that all the blind will have a full range of comprehensive services. And finally, the blindness system consists of only a few large agencies and many small ones. Most of these latter are dependent on grass roots support, particularly in the form of private endowment, and are therefore capable of resisting public pressure for change. The result is that there exist almost no points at which public action might effectively move the system as a whole.

---

mated that the official blindness system employs approximately 10,000 today. *For a blindness system designed to optimize the human functioning of the entire blind population of the U.S., approximately 118,000 employees would be needed.* (The bulk of them would be engaged in providing services to those over the age of 44.) Even under the principle of "least cost to the system itself," *68,000* employees would be necessary if the system were to encounter all of the blind.

These estimates are based on the assumptions that all blind people would be covered, that programs would be designed to meet the special disabilities and potentials of different categories of the blind, and that there would be no change in current methods and technologies. *Clearly, it will be impossible to assure universal coverage of the blind until radical improvements are made in the character of services, the structure of jobs and manpower in relation to services, or in the technology of services to the blind.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In the context of such fragmentation, the discretion of individual agencies is used in a way that works against change. Consider these major elements of agency discretion:

Control of client access. Agencies can limit their services to "good" clients and can actually seek out clients meeting their criteria. In large cities, for example, there is active competition for children who are blind only. And the parents of such children often learn to go "agency shopping" as a result.

Control of the duration of the client's stay. Agencies are often free to determine how long they will serve a client. Agencies tend to keep "good" clients for longer periods of time than "bad" clients—months instead of weeks, and not infrequently for years.

Control of the portion of the client's "life space" which the agency takes up. Agencies may, at their discretion, extend their services not only to disabilities directly relevant to blindness, such as those associated with reading or travel, but to the client's overall health, his family relations, his psychological well-being, and the like. At one extreme, the agency becomes the client's total environment.

Control of investment per client. As scope of service and duration of stay increase, the agency increases its dollar and manpower investment in individual clients.

Through the manipulation of these discretionary "valves," agencies tend to behave like homeostatic systems. *They can and do compensate for a declining population of the "right" sorts of clients by increasing their investment in the clients they do serve*—all under the justification of improving the quality of service. As a consequence, the agency staff remains stable even though client populations decrease. The agency behaves as though it were optimizing the use of its existing resources.

This homeostatic system is self-reinforcing, but it also depends on a number of factors which are both incentives to and means by which agencies maintain something like a stable state. There is, for example, an ideology still in good currency among professionals within the blindness system. It centers on concern with individuals rather than with numbers, on high standards of service as defined by the profession, on "worthy" clients, and on professionalism conceived as a definition of roles both for the provider and for the user of service. This ideology encourages the agencies' homeostatic tendencies: after all, if worthy clients deserve the highest quality professional service, then one need not be overly concerned with the numerous, invisible others.

Another factor reinforcing the tendency toward homeostasis is the chaotic nature of information about the blindness system. Associated with this is the systematic failure of most agencies to pursue follow-up studies. They simply do not make a practice of discovering what happens to their clients after service is completed and clients are

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

discharged from agency care. As a result, the entire system is deprived of, and protected from, the opportunity to learn from its successes and failures.

The sources of innovation

During the past 25 or 30 years, there have been a few significant innovations in serving the blind. Because new technologies and methods must play a large role in any improvement in service to the blind, it seems worthwhile to consider two of the more interesting cases of innovation.

The only important technical innovation in travel for the blind in this century has been the "long cane" method, which is the invention of Dr. Richard Hoover. It consists in replacing the old orthopedic cane with a light, long cane, the purpose of which is to sense the environment rather than to serve as a support. The long cane precedes the training foot in an oscillating motion and permits the skillful user to move rather rapidly over varied terrain. Hoover, a former physical education instructor, developed the cane while serving in a U.S. Army group set up to provide rehabilitation for blinded World War II veterans. At the time, accepted practice in the blindness system was to assume that the blind have little capability for travel and that what little such capability could be developed required instruction from a teacher who was himself blind. (This approach is still in currency in many sectors of the blindness system.) The group of blind veterans were for the most part vigorous and healthy. They found that little or no rehabilitation had been prepared for them, and they besieged the commanding general, pounding with their canes on his desk, demanding the program they had been promised. It was in this context that Hoover was given an opportunity to develop and teach his method. That method was revolutionary in its assumptions that the blind could travel independently, that a long antenna-like cane could help them, and that a sighted instructor could teach them.

The introduction of the long cane technique was an unusual event which was quite out of keeping with the traditional behavior of the blindness system. Seen against the backdrop of such traditional behavior, three special circumstances characterize its introduction. First, the champion of the invention was an "outsider." Hoover had previously worked in blindness agencies, but merely as a physical education instructor. It was only later that he became an ophthalmologist. Second, the invention was precipitated by a dislocating, crisis-like event for which the system had no prepared response. And third, there was a strong and active group of blind clients who were in a position to make demands and to enforce them.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Consider, as a second case, the entry of blind children into public schools, which dates from the 1950's. Previously, it had been assumed that blind children could be educated only in a separate school which provided them with the security of being together and which catered exclusively to their special needs. The story of the opening of public schools to blind children is connected to a disease called retrolentil-fibroplasin, which affects premature infants and which was discovered in the 1950's (a story in itself) to be a consequence of excessive oxygen delivered to the infants in their incubators. Premature infants reared in incubators tended to be children of middle class parents. The movement to introduce blind children into the public schools and to provide a program of supplementary aids in reading and communications skills, began among groups of middle class mothers, initially in California, who found the physically segregated education offered their children repellent and who organized to develop an alternative to it.

Again, there were two special features of this innovation in services to the blind. First, there existed a crisis situation created by a demand the system was not prepared to handle. The number of retrolentils grew precipitously in the 1950's and declined soon after the cause of the disease was discovered. And second, there was a strong and active group of service-users, in this case relatively well-to-do, who organized to enforce their demands.

It should not be supposed that innovations are an untarnished good. Characteristically, innovations which at the time represent humane advances—the vocational rehabilitation movement of the 1940's comes to mind—survive to inhibit the system's response to the *next* requirement and thus become a part of its dynamic conservatism. Any new innovation achieves success and acceptance only through a kind of warfare on the old.

A strategy for change

Several requirements for change have so far emerged. First, the blindness system should reallocate its priorities so that it makes a firm commitment to encounter every blind person. Second, the system should reallocate its priorities toward subcategories of the blind so that the design of its services reflects changes in the make-up of the blind population. Third, the organization and technology of services must be restructured so that services are appropriate to the needs of the great majority of the blind and so that current manpower constraints can be circumvented. Fourth, the social systems and supporting ideologies of the blindness agencies must be made compatible with the restructured priorities and services. Finally, the methods of data gathering and processing must be changed so that the blindness system can become an effective learning system.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Some of the specific kinds of change flowing from these requirements are as follows:

Diffusion of best practice. One of the characteristic features of the blindness system is the large gap between agency practice considered "best" by experts inside and outside the field, and the practice of the majority of agencies. This is true even of a new technique like the long cane, which has made surprisingly little progress in penetrating the blindness system since its introduction in the 1940's. The same is true of training in low vision aids, comprehensive rehabilitation, and the public school track for education of blind children. In the case of services for multiple-handicapped children and the aged the gap is so great that best practice is virtually the *only* practice. In the language of business, there has been very little market penetration, and the reasons for this lie largely in the fragmentation of the blindness system.

It has become clear that the mere existence of pilot projects does not of itself insure widespread adoption of new practice even if that practice is of established effectiveness. The dynamic conservativism of the system means that an active strategy of change is required—one that creates pressures and incentives for the building of new capacity at the same time that it creates demand for that capacity. Demonstration, information-dissemination, and training are necessary but not sufficient conditions for the diffusion of best practice.

New models of integrated service. There exists a pressing need for integration of services to the blind. On one level, services related specifically to blindness (training in reading or mobility, for example) must be integrated with services relating to health, employment, or financial support so that a blind person need not negotiate several totally disconnected systems. On a second level, services relating to the improvement or use of residual vision must be integrated with services relating to blindness. Low-vision aid clinics, generally limited in their scope to aid in reading, tend to be disconnected from the bulk of services to the blind, which proceed as if the client had no vision at all. And finally, there is a need for *reintegrating* services around *new* characteristics of the blind person. Given the increasing incidence of the aged blind and the rising rate of multiple-handicapped in that group, it is relevant to ask if services to the aged might more effectively be organized around age rather than around blindness.

All such forms of integration would require the establishment and management of networks of service—that is, of linked arrays of agencies. There would be far greater emphasis than at present on infrastructure functions like admissions, screening, diagnosis, referral, "tracking" individuals through the system, guidance, and evaluation. Network management would emerge as the central form of leadership within the system.

Power in the hands of users. If the idea of integration points in the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

direction of a greater connectedness in the blindness system, then the notion of vesting power over service in the client points in the direction of a special kind of decentralization. Such a change would affect not only the manner in which services are delivered but the process through which services change over time, both of which would become rather like a market mechanism. At least three variants on this theme suggest themselves:

(1) Establishment of "contract managers." These agents would be separately funded to provide services to given populations of the blind but would not manage service-providing bureaucracies. Instead, they would contract with other agencies, old and new, to provide services on request. Contract managers would have the freedom to shift contracts on the basis of observed performance. The intent would be to free managers from the job of maintaining their own bureaucracies and hence from the pressures to optimize the use of their own staffs.

(2) Establishment of ombudsmen for the blind. Their function would be to help blind persons negotiate the service system. Independently funded, they would represent the interests of the blind in dealing with the agencies.

(3) Direct payments to the blind. The blind could be given funds with which to purchase services, either from established agencies or from new ones that might come into being to serve a new market.

None of these changes will emerge from a single approach which relies for its effect on the manipulation of one factor alone, such as manpower, funding patterns, or ideology. The dynamic conservatism of the blindness system has multiple roots which will yield only to multiple attack. Such a multiple attack must be of a "critical mass" appropriate to overcoming the system's conservatism. It must embrace a number of programs which are mutually consistent or at least not mutually inhibiting. It must address itself to the few leverage points in the blindness system. And perhaps most important of all, an effective multiple approach must insure that the blindness system will become an effective learning system. The system will not learn what to do unless it becomes more capable of learning; it will not act on the basis of its learning unless it is made to do so by forces which are commensurate with its own resistance to change.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

When government works

ROBERT WOOD

We are short of talent, short of people, thin on experience, thinner on patience. . . . We are overworked, overburdened, overweight and, on many things, overly anxious. . . . Increasingly, ours is a society slipping out of phase. In sector after sector—from the delivery of medical services to the delivery of the daily mail—we are barely able to do what we are doing, with no assurance how long we can continue.

Horace Busby, *Detroit address, Nov. 14, 1968*

By popular consensus and professional diagnosis, the Achilles heel of American government today is government itself. Conflicts in parties, interest groups, philosophies; apathetic or alienated popular attitudes, limits on available resources—all these don't prevent us from feeding the hungry, reforming the welfare system, discouraging the overthrow of democratic governments abroad. Bureaucracies do. Organized public efforts do.

According to current commentary, bureaucracies sink their own ships, design and build needless highways, and, to repeat the most fashionable cliché, "destroy more homes than they build" in urban renewal. They also always seem to perpetuate themselves, to multiply, and to demand increasing taxes—in total effect they keep the country in a mess.

The contrary facts about bureaucratic life do not appear to alter this national judgment. From 1953 to 1967, for example, federal purchases of goods and services dropped from 15 per cent to 11.4 per cent of the GNP, and the number of federal civilian employees remained the same as a percentage of the work force. Yet people continue to believe that government grows and grows. Cases of clearly understaffed and underfunded government agencies are

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ignored. The Department of Housing and Urban Development, for instance, tripled in program outlays between 1965 and 1969, but its work force rose by less than 9 per cent. At the end of this period, its total manpower was in the same relative position it had been at the start—500 fewer employees than the FBI and 500 more than the Bureau of Indian Affairs—and yet it was described by a leading journalist as "burgeoning."

In point of fact, the typical characterization of government as inherently sprawling, irredeemably inefficient, masks a deeper, quite different complaint. *It is not so much the inefficiency of bureaucracy we complain about as its efficiency for purposes other than those we feel appropriate.* Viewed strictly in terms of transportation engineering, the American interstate highway program is a monumental achievement. Since 1950, urban renewal has helped preserve or restore the central business district and the municipal tax base in a thousand cities. In recent years, the customs and immigration services have proved themselves more adaptable and effective at the terminals in handling major increases in air passengers than the private air lines.

The real difficulty is that public agencies often achieve goals and carry out objectives that political observers or the public have come to feel are out-of-date, inadequate in scope, or plain wrong. (Alternatively, we feel that the objectives are in fact set internally by the public organizations themselves; hence they are self-serving, not serving us.) The effectiveness with which such ends are pursued merely compounds our frustration.

Put in these terms, the issue is not so much how to make government work, but how to make it work for public purposes. The problem to be solved is not the elimination of "bumbling" but powerful bureaucracy, but rather the clear unambiguous statement of policy goals and effective control over their attainment. A solution will necessarily embrace two major reforms. First, the process of supervision and control must be made more systematic and comprehensive, and the current near monopoly of oversight by the presidential staff (including both careerists and "in-and-outers") must be broken. Second, the behavior of the permanent career employee needs to be professionalized and made more responsive to changes in the larger political system. In short, what America needs is a better bureaucracy, not less of one; disciplined bureaucracy, not amateurs run riot. Given these two conditions, government works.

The conventional wisdom

According to orthodox analysis, the gap between the goals and performance of American government is due to an absence of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

effective executive supervision. The president, it is argued, cannot direct the executive branch for the broader purposes that his administration represents. Instead, the management of key programs is controlled by an informal "triple alliance" of interest group spokesmen, members of Congressional subcommittees, and the civil servant chiefs of bureaus, divisions, or offices. Such alliances, as the analysis runs, are manned by professionals who are conditioned to last out any administration. They are not prone to risk-taking or problem-solving. They go by the book, ignore the citizen, protect their organizations, conserve their programs. The net result is parochial, single-purpose bureaucracy, oblivious to the side effects that are often an affront to the constitutional responsibilities of the system.

From the day he enters office until the day he leaves, every president during the last three decades has had to grapple with these program alliances; every chief executive has had to struggle to retrieve the authority that seems to slip down to the whirlpool of interests below him. The strategy that they and their advisors (from Louis Brownlow to Richard Neustadt through Charles Schultze) have evolved is now well known and widely accepted. It has four parts:

1. Strengthen the institutional presidency—that is, the Executive Office of the President in general and the Bureau of the Budget in particular;
2. Strengthen the supervisory capability of the incumbent president and increase the size and visibility of the White House staff;
3. Reorganize departments and agencies at frequent intervals, reducing their number, tightening the lines of their accountability to the president, and introducing new techniques for evaluating their performance;
4. Whenever important new activities are authorized, ignore established agencies and establish new ones.

The Executive Office has expanded in accordance with this strategy for thirty years following the report of Brownlow's Presidential Committee on Administrative Management. The Bureau of the Budget transferred from Treasury and the Council of Economic Advisors, the Office of Science and Technology, the Office of Emergency Planning have come into being; others, like the National Resources Planning Board, have both come and gone. The Budget Bureau in particular has expanded in authority; its power rests on the premise that it holds an unswerving and nonpartisan loyalty to the presidency as an institution and on the assertion that it possesses a superior perspective and competence by virtue of taking the "big view." Similarly, the White House staff has multiplied from FDR's dozen men with a passion for anonymity to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

President Nixon's 120 plus, whose names and faces regularly grace the national weeklies. They provide resources for presidential supervision—but only to the president as a person.

The shuffling and reshuffling of agencies and departments has been a permanent feature of the Washington scene since the Reorganization Act of 1946, although the executive initiative originally provided has been whittled away over the years. In the 1960's, planning-programming-budgeting systems (PPBS), which have built on the accounting and budgeting reforms of the previous decade, have been added to the executive's evaluative airs, and the disposition has continued to create new agencies in the alphabet tradition of the New Deal. The Peace Corps and the Disarmament Agency of John Kennedy and the Office of Economic Opportunity of Lyndon Johnson, attest to the principle that whenever an urgent new program hoves into view, a president wants the vitality of a new organization to accompany it.

In spite of this steady evolution in the instruments of presidential control, the clamor of complaint makes it clear that bureaucracy is not yet bridled. The thirty years war against the triple alliance seems to achieve occasionally a semblance of order within an increasingly complex government. But if one is to judge by the continuing calls for structural reform in the Budget Bureau, or for more power in the White House, then no early end to hostilities is in sight, let alone a victory for the presidential forces. A full generation's experience with bigger and better presidencies has left the situation substantially unchanged. This suggests that there are some operational limitations built into the doctrine of presidential oversight. It also suggests that there may be some flaws in the conventional view of the triple alliance and the flow of bureaucratic power.

A curious inversion

Confusion is created when men try to do too much at the top. In order to know what decisions are being made elsewhere in government, the White House tends either to spend time reviewing programs or to take more and more decisions on itself. The separate responsibilities of the White House, the Executive Office, and the agencies are fudged, and the demarcations of who does what become uncertain. The result is a blurring of the distinction between staff and line, between program and policy. Decisions tend to be reviewed and reviewed; and operational delays increase accordingly.

As this confusion continues, a curious inversion occurs. Operational matters flow to the top—as central staffs become engrossed in subduing outlying bureaucracies—and policy-making emerges at the bottom. At the top minor problems squeeze out major ones,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and individuals lower down the echelons who have the time for reflection and mischief-making take up issues of fundamental philosophical and political significance.

So, suspicious Executive Office staff will compulsively follow the execution of a given contract for program work, say, in establishing urban planning standards, to the dotting of the last "i". At the operating level, program staff can graciously accede to this intervention, using the time thus freed to lobby for a "technical" amendment pending before Congress that gives preference to local governments who employ private planning consultants over those who rely on public planning agencies. At the end of the exercise, the Executive Office has learned a smattering of planning technique; the agency staff has made a major decision in public policy.

The dilemmas of the permanent presidential staff are perhaps best traced in the evolution of the Budget Bureau. Originally, the Bureau exercised control primarily by means of the budget, legislative reports and reviews, and occasional forays into management matters; but over the years it has gradually abandoned these generalized forms of oversight. The pressure of big and deficit-ridden budgets and the expansion of complicated programs, often with sophisticated theoretical and technical components, have increased the propensity of Bureau staff to assume direction of operational matters. Internal Bureau reorganization in 1967 reflected not so much any increased interest in policy-making as a disposition to "run" activities, especially those that were not clearly under the mandate of a single agency. The distinction between staff and line became blurred to the point where in 1968 the Bureau could actually undertake to direct the suballocation of funds below .005 per cent of a departmental budget. Clearly, in these circumstances, personnel preference, not professional knowledge, guides the decision.

The problems among the White House staff are almost as grave. Recruited from outside, likely to be amateurs to government (though not to politics), suspicious of the professional Washington establishment, they deal with both program oversight and politics. To the extent that they subscribe to the doctrine of the triple alliance, their compulsion is to unravel the techniques of the interest groups that surround a program or hover around a department. The result is an overload of concerns, because interest groups and Congressmen tend to take their troubles directly to the White House, filling calendars with vexing political problems full of booby traps in highly technical language. Such problems usually are of little consequence when measured against the major political concerns of the White House, yet they add up to a disproportionate share of White House effort.

By exhausting the available time, the operational proclivities of the Budget Bureau and the Congressional interest group politicking

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of White House aides tend to immobilize their overview and directional functions. Too many items handled too quickly under too much pressure multiply the range and detail of the decisions reaching the president himself. There is control in the superficial sense that, somewhere, an Executive Office staff member has grappled with an operational problem. But on matters that require genuine policy attention, control is lacking because time is too short.

Thus, throughout the year 1966-1969, the Budget Bureau staff tried their hand at dividing $53 million of "open space" funds among inner city and suburban localities, while White House staff requested weekly reports on a housing program with a two year lead time. But in the same period, the Bureau never got around to allocating funds for 12 pilot neighborhood center programs that the president had publicly announced, and the White House never resolved the different definitions of "citizen participation" that were bringing poverty programs to a standstill. To take these steps, apparently, would have endangered central decision-making.

A question of loyalties

To the excessive involvement with operations of presidential staff, and their compulsion to control matters, must be added the further difficulty of their motivations and authority. Budget personnel take the stance that they are isolated from politics in a way that other bureaucrats can never be; that they are loyal to the president, whoever he may be; and, therefore, that they are objective and professional in their judgment. Yet the core of the Bureau's responsibility *is* the budget; the central issue for the Budget Director each year is whether or not the budget is balanced; and the values that the organization ultimately assumes are bankers' values. When the chips are down, and a deficit or surplus hangs on the level of an agency program, or the resources available to its effective management, the preferences of a budget-maker are predictably financial.

The biases of the White House staff are less predictable. Here the critical factor is whether the views and values expressed are those of the president or of the staff members. A staff member may transmit the wishes of the president in a literal and automatic fashion; or he may anticipate from experience a presidential reaction, so that he can relieve the president's burden and still represent him faithfully. His bias in such cases may lead further from the president's wishes. It is conceivable that, in a notably hazardous occupation, he may seek to establish rapport with other permanent political sectors of the capital. But then miscalculations may occasionally distort outgoing and incoming messages.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

It is always difficult to interpret with precision the behavior of men who are close to a source of great power, men whose lives are perpetually under review, and whose power is dependent on their personal standing. One thing, however, is certain: the wider the range of White House involvement, the less credible becomes the notion that the chief executive is always personally concerned. A non-White Houser tends to take at face value the first half-dozen calls from the White House that begin, "The president has asked me to ask you . . ." When the calls multiply, and the phrase repeats, skepticism intrudes on the relationship.

The longer one examines the awesome burdens and limited resources of those who help the president from within his immediate circle, the more skeptical one becomes of a strategy for overseeing government by "running" it from 1600 Pennsylvania Avenue. The semiheroic, semihopeless picture has been captured many times in several administrations: dedicated men, of great intelligence and energy, working selflessly through weekends and holidays to master an endlessly increasing array of detail on complex subjects beyond their understanding on which decisions must be made *"here"* because a resolution elsewhere is not to be trusted. They persevere, taking their stand against "the bureaucrats," pushing programs through against sullen, hidden resistance from the departments. Committees are abolished, agencies rejuggled, staff reviews simplified, new reporting forms introduced, all in the effort to assure that more and more decisions are, or can be, presidential. Yet, in the end, after thirty years, the effort to help the president in making government work has not succeeded. As one veteran White House staffer, McGeorge Bundy, has observed, "The ablest of presidents, with the most brilliant and dedicated of Executive Office staffs, simply cannot do it alone."

Cabinet government?

Who else and what else is needed so that government can work for general, accepted, announced, prescribed, public purposes? How can effective control be maintained without continuing operational build-up in the presidency?

In his 1967 Godkin Lectures, Bundy nominated an obvious resource—the cabinet—and its potential is probably greater than even he acknowledged. As a collective body the cabinet has usually been unwieldy and uncertain and is likely to remain so. The principal common concern of the cabinet is the political survival of the administration, and even this is not always shared. But Bundy's thesis is not a parliamentary one: he would recast the role of cabinet members so as to make them *presidential outposts* within their departmental domains, politically subduing their interest

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

groups and managerially directing their bureaucracies. His image is that of a secretary "highly autonomous and deeply responsive in relation to the White House," who is continuously the agent of the president but is endowed with great discretion and flexibility.

This secretarial assignment as president's men contrasts sharply with the conventional wisdom of Washington watchers. Until Bundy's lectures, many observers believed that cabinet members were, by reason of the interest groups they were assumed to "represent," natural enemies of the presidency. Yet, in fact, recent secretarial behavior has come closer and closer to the Bundy norm. Appointments made strictly because of ties with interest groups or for reasons of geography grow rarer, as these considerations become less important in presidential politics. The demand increases for effective program performance, and managerial skills are valued higher than partisan symbolism.

In departmental affairs, broker relationships with interest groups and Congressional committees do not disappear—and they should not be expected to. Agencies will continue to represent the particular perspectives fashioned by their work. What does change is the belief that secretaries will forever be "captured" by the interest groups, unable to rise above them, and that only physical proximity to the president ensures loyalty. Instead, a secretary, trusted as a president's man, often exercises reciprocal impact on both the interests and Congress—persuading, changing, influencing in the name, and for the benefit, of the chief executive. The "triple alliances" are, in fact, not intractable, but subject to redirection and even to neglect, as more massive forms of public appeal become available.

In order to assume this job of operational oversight, a cabinet member needs help just as the presidency did in the thirties. Executive Office support, rather than competition, is one obvious need, and this is in the power of any president to command. More program evaluation and analytical capability at the secretary's level is another; and here the initial impact of PPBS in the Defense Department is indicative of what can be achieved. (Unfortunately, the Budget Bureau preempted that technique in 1966, and its heavy-handed and clumsy application of PPBS discouraged most cabinet departments from developing similar program-policy staffs.)

A third requirement is the establishment of much stronger links between presidential outposts in the departments and the permanent program units. One HUD innovation in this respect was to assign program responsibilities to assistant secretaries, who are themselves presidential appointees. This reform placed a heavy premium on finding assistant secretaries who could absorb new information and direct new enterprises quickly; it also effectively eliminated the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

problem of the all-powerful bureau chief. Presidential appointees made the final decisions in major project approvals and presidential appointees dealt with inquiring Congressmen. As a result, the objectives of the president and those of the program were balanced in specific terms, day after day, by officials who came to know their work.

Professionalism and coordination

The extension of presidential authority via the cabinet and the transformation of presidential outposts into command posts are not sufficient reforms. At least three other changes in the present method of public operations are necessary, if the rule of "triple alliances" is to be broken, presidential oversight restored to effective boundaries, and bureaucracies set to work efficiently to achieve the public purposes for which they were established.

1. The outlook of the middle-echelon bureaucracy, especially those who entered the ranks in the 1960's, needs to be recast.
2. More and more programs have to be introduced on a multi-agency basis, not under a single jurisdictional authority.
3. Congress and president need to synchronize their schedules—that is, the legislative and executive aspects of financial and manpower planning have to work together.

An administration can risk sharing operating responsibilities among agencies (rather than continually reshuffling organizations) and decentralizing authority only if commensurate changes take place in the professional administrative establishment. The chief adjustment required here is one of attitude, the development among the career managerial professionals of a responsiveness to program innovation and collaboration so as to ensure that directions initiated by the administration will in fact be executed as conceived. Today, the danger is not so much that administration policy will be carried out grudgingly as that it will be carried out excessively. As a disposition to handle operational detail grows at the top of the executive branch and a disposition to dabble in policy-making infects the lower ranks, the uncertainty of bureaucratic performance increases.

Over the years, the chief criticism leveled at the American civil service has been its parochial professional bias, its orientation toward occupation rather than program. Lacking the British tradition of the generalist administrative class, and building its first positive programs around scientific and engineering activities, the United States government recruits by profession—lawyers, accountants, architects, engineers, appraisers. Such specialized education and occupation encourage bureau and program parochialism, and many career men become insensitive and even resistant to broad policy

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

activity. Often policy is created almost accidentally at the operational level as a by-product of occupational creativity, since the decision-maker's preoccupation can be with his profession's values, not program objectives. A classic example in recent years was the resignation of two senior administrators when given assignments in the then new rent supplement program—because it "conflicted" with established practices of accountancy.

To this long-standing difficulty, a second liability has been added: conscious policy innovation by the lower echelons, a growing disposition of career executives to continue policy-making rather than to proceed to program execution. The urge has apparently grown among line administrators to inject doses of home-grown philosophy into every operation, asserting that "Congress couldn't really have meant to proceed this way," or "the Secretary must have been poorly advised." Intoxicated by visions of policy formation as advanced in academic seminars, beguiled into believing that participatory administration gives the lowest regional officer the right to rewrite the rulebook unilaterally, a disturbingly large number of career professionals have become seriously undisciplined.

The havoc they have wreaked in the poverty program, in urban and welfare assistance, and in job training, is only now beginning to be appreciated. Perhaps, the most dramatic recent example was the way in which early definitions of citizen participation survived successive reformulation of the Congress and the administration to recast the doctrine and bring city halls and neighborhood groups into collaboration. At the regional level, in office after office, federal administrators never changed the signals.

Before a secretary can truly invest program responsibility in a career officer, that officer's outlook and style have to be genuinely professional. That critical distinction between bending rules (in a specific case) to meet the spirit of a program and changing rules covertly for most cases has to be appreciated. Young career men need to recognize that their legitimate power is never individually acquired, it is delegated. The new spirit of policy activism combined with the old tradition of occupational provincialism is a disaster for effective government.

There are no instant solutions to this problem of outlook, conditioned as it is by the general temper of society. Midcareer training programs, strong disciplinary action, effective information and reporting systems are all good medicines. For the present it is important simply to record that some of the major maladies of American government arise out of its nonbureaucratic behavior rather than an excessive bureaucratic posture. While the popular image of the typical government agency is one of stagnation and resistance to innovation, the present trend is more likely one of action without authorization.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A further necessity is the rapid strengthening of the managerial devices required for improved interagency collaboration. Robert Weaver is fond of observing that nobody likes coordination except the coordinator; and a sizable graveyard of ineffective interagency committees, task forces, and working groups testifies to the wisdom of that remark. It is equally true, however, that the old administrative doctrine of "going it alone," each agency operating its own program in splendid autonomy, is now a prescription for failure.

Like the space program, our domestic programs require a complex assembly of different organizations, different skills, and different programs. In the urban field, for example, a housing program unrelated to an education program unrelated to a job program unrelated to a health program will not get off the ground. Successful community programs contradict every tenet of traditional administration: they are nonnational (i.e., they cannot be applied uniformly across the country, in Seattle as in Atlanta); nonpublic (they must involve private as well as public organizations); and nonagency (HUD cannot help build a neighborhood center without a clear concept of the health or poverty program to be housed there). Collaboration is the essence of modern administration; slippage in collaboration guarantees bureaucratic failures and public indignation.

The attempt to improve interagency collaboration by taking the problems to the presidency is a prime cause for White House overload today. Operational detail and program niceties baffle the well-meaning intervenor. Cabinet-level coordination among the principal agencies is vital in setting policy guidelines and initial agreements. But the principal answers are to be found in the "lead agency" concept, represented in the so-called Convenor Executive Order issued by President Johnson, and in the decentralization of authority to regional offices with uniform boundaries and responsibilities, on which a start was made early in 1969. By placing primary operating responsibility in a single department (there are enough tasks so that each agency can have its day in command) and by placing much greater decision-making power in the field, complex programs dealing with complex problems can be made to move.

There are some qualifications to this counsel. The secretaries or agency heads involved have to be sympathetic to the joint venture and communicative about it. They and their immediate staffs need to make it clear that the combined effort has priority over any single program's success. A secretary's subordinates need to be judged on this capacity to collaborate—*and so should the performance of a secretary by a president.* "Paranoidal parochialism, evidenced in internecine bureaucratic combat on the part of a Department," as one White House aide has observed, is as dangerous as the doctrine of Executive Office infallibility.

The lead agency concept must also be supported by the president

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and the Congress. In addition to making clear that there are enough combined programs to make every major agency a leader sometime, presidential messages should clearly delineate the type of interagency cooperation and participation that is necessary and mandated for the new programs involved. There must also be language in the appropriation bill or the report of the Appropriations Committee, or in the legislative history, authorizing the type of cooperation and, most important, commingling the funds.

There is a third series of professional reforms that is required—and this bears again on the area of congressional-executive relations. More energy in Washington is consumed, more frustrations generated, more constraints placed on effective management by apparent conflicts in legislative and executive calendars than by any other single condition. Occasionally out of phase throughout the whole life of the republic, these separate calendars have usually been out of phase during the course of this century, with serious consequences since World War II.

A presidential budget is submitted in January, and most major messages are in shape by spring, while congressional action is rarely forthcoming until late summer or fall. In the interim, matters proceed under continuing resolutions regarding appropriations and manpower freezes. Established routine programs can anticipate these time lags and live with them. But new programs, subject to sudden shifts in workloads or demands for speedy action, are condemned to inauspicious starts, so that their managers are seen to be failures before they have had a chance to act.

Title VIII of the Civil Rights Act of 1968 was the first genuine program with teeth in it to provide open housing in the American suburbs. It was enacted five days after Dr. King was murdered. Yet, five months after his death a Congressional committee considered—and denied—an appropriation request of $14 billion for that program. Only the unprecedented resubmission of a supplemental budget by the president and the secretary of HUD, and the stimulation of major political resources in the process, produced a start-up figure of $2 million of administrative money in October. By statutory mandate, the program had to become operative by December 31st!

Taking management seriously

Building effective government in the United States is not a challenge for which there are simple answers. Giving tasks back to states, localities, and neighborhoods, in the hopes of reducing them to manageable proportions, is not a self-evident solution—not until the resources and motives of these institutions are appraised. Building up presidential staffs, in the expectation that they can think, act, lead, and manage may be necessary but is far from sufficient.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

With operations flowing increasingly to the top and policy covertly bootlegged in at the bottom, the dilemma can be resolved only by a systematic series of steps which extends proper presidential oversight throughout the executive branch, encourages operational discretion at the program level, and rewards professional behavior.

The plain fact is that this country has never been serious about establishing a responsible and responsive bureaucracy. Still captivated by the revolutionary effort to tame a king's power; still misquoting Lord Acton, and implying power encourages corruption rather than rectitude; still regarding the delivery and nondelivery of a particularly public service as a scene in a morality play, the American government has relied heavily on the energies and the devotion of the organization amateur. The political lawyer who has suddenly been asked to handle administrative matters in the White House; the academic economist called on to weld together the energies and loyalties of a large number of men; the neighborhood leader introduced into participatory programming; the government engineer or accountant asked to grow into leadership—these have been the executors of our public policy.

This country possesses policies and programs that are clearly capable of remedying many of our paralyzing ills if only they are well-executed; it cannot afford amateurs in administration any longer. We cannot will government away; we cannot endure a second-rate government; we cannot solve problems by rhetorical denunciations. We must at long last take the problem of public management seriously.

STATEMENT OF OWNERSHIP, MANAGEMENT, AND CIRCULATION
(Act of October 23, 1962; Section 4369, Title 39, United States Code)

1. Date of Filing: October 1, 1969. 2. Title of Publication: *The Public Interest*. 3. Frequency of Issue: Quarterly. 4. Location of Known Office of Publication: 404 Park Avenue South, New York, N. Y. 10016. 5. Location of the Headquarters of General Business Offices of the Publisher: 404 Park Avenue South, New York, N. Y. 10016. 6. A. Publisher: Warren Demian Manshel, *The Public Interest*, 404 Park Avenue South, New York, N. Y. 10016. B. Editors: Daniel Bell and Irving Kristol, *The Public Interest*, 404 Park Avenue South, New York, N. Y. 10016. C. Managing Editor: None. 7. Owner: National Affairs, Inc. (nonprofit) 404 Park Avenue South, New York, N. Y. 10016. 8. Known Bondholders, Mortgages, and Other Security Holders Owning or Holding 1 Per Cent or More of Total Amount of Bonds, Mortgages, or Other Securities: None. 10. Extent and Nature of Circulation. A. Total No. of Copies Printed: Average No. of Copies Each Issue during Preceding 12 Months, 10,000; Single Issue Nearest to Filing Date, 10,000. B. Paid Circulation: (1) Sales through Dealers and Carriers, Street Vendors and Counter Sales: Average No. Copies Each Issue during Preceding 12 Months, 1,500; Single Issue Nearest to Filing Date, 1,500. (2) Mail Subscriptions: Average No. of Copies Each Issue during Preceding 12 Months, 8,200; Single Issue Nearest to Filing Date, 8,200. C. Total Paid Circulation: Average No. of Copies Each Issue during Preceding 12 Months, 9,700. Single Issue Nearest to Filing Date, 9,700. D. Free Distribution by Mail, Carrier, or Other Means: Average Number of Copies during Preceding 12 Months, 120; Single Issue Nearest to Filing Date, 100. E. Total Distribution: Average Number of Copies Each Issue during Preceding 12 Months, 9,820. Single Issue Nearest to Filing Date, 9,800. F. Office Use, Left-Over, Unaccounted, Spoiled after Printing: Average No. Copies Each Issue during Preceding 12 Months, 180. Single Issue Nearest to Filing Date, 200. G. Total: Average No. Copies Each Issue during Preceding 12 Months, 10,000; Single Issue Nearest to Filing Date, 10,000. I certify that the statements made by me above are correct and compete.

Irving Kristol, Editor

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE FUTURE OF URBAN TRANSPORTATION: I

Mass transportation: Cinderella in our cities

THOMAS E. LISCO

URBAN mass transportation in the United States is in the early stages of a vast transformation, a transformation that will rival the rags-to-riches change visited upon a fairy tale Cinderella.

There is little question about the rags part of the statement. Mass transportation in the United States can aptly and generally be characterized as dirty, run-down, and financially strapped. It is suffering large deficits and has lost more than half its patronage in the last twenty years. The larger the system, the larger the deficit and the more critical the situation; in New York City the deficit on operations alone was over $50 million in fiscal 1968 with 1969 projections of $150 million. Similar statements can be made about commuter railroads. Deficits abound, systems are run-down and dirty, and stepping into a present day commuter railroad car is often like entering a museum piece of the nineteenth century.

But riches? Oddly, that is also true. One might think that the consistent failure of mass transportation to hold its own over more than two decades indicates its lack of economic rationale, and thus

The views expressed in this paper are solely those of the author and do not necessarily represent official views or policy of the Chicago Area Transportation Study, with which the author is associated.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

suggests an imminent and appropriate demise. But the fact remains that mass transportation arteries are as important to the well-being of our cities as express highways. Because mass transportation performs a vital economic function, not only for the individuals who use it, but also for the very form and efficiency of the city, it *must* be made to succeed. Further, there are forces now at work that may help ensure this success.

The rational commuter

To understand mass transportation—its problems and possibilities —requires understanding of its most important customer, the commuter.

The typical urban American's conversation about getting to work follows a predictable pattern beginning with a long monologue that indicates exactly how he saves time getting to work. If he drives, he knows all the tricks. He times traffic signals to the second, follows special routes at different times of the day, and he has pinpointed the location of every speed trap. Altogether, he has carefully thought through the task of getting to work in order not to lose a second's time. He has made an exact science of commuting. A second monologue follows this one and it concerns the others on the highways. What a bunch of idiots they are! Why do they insist on congesting "my" road, and, for heaven's sake, why don't they use mass transportation? It is perfectly clear to the speaker that he uses his automobile for good reasons, but the others who drive must be irrational and peculiar. Their only motive for driving surely must be a totally irrational "love affair" with the car.

If our conversationalist happens to go to work by mass transportation, he, too, has worked his trip out to the smallest detail. He knows the minute he must leave home in order to catch his bus or train. He also knows where to stand in order to catch the car that offers the greatest likelihood of finding a seat, or lets him off nearest his exit at the station. Railroad commuters are known to sit in the same seat of the same car each day, and to be highly resentful when ill-informed interlopers take "their" places.

If the auto driver is outraged by the others who use the roads, the train commuter is bewildered by them. How can people choose to fight expressway congestion, to breathe fumes and build up nervous tension, when they could use mass transportation? The commuter rail traveler sits in his train comfortably reading the paper, while drivers are stuck in unmoving lines of cars on the expressway. Because he generally gets to work faster than if he drove, the auto driver's choice seems senseless to him.

In fact, however, both decisions make sense. Commuters are just as careful in choosing their mode of travel as they are in calculating

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

strategy for the interior portion of their trip. Indeed, it would be odd if they decided their mode of travel off-handedly, and then calculated minor maneuvers to the second.

As one might expect, the basic decision between using the automobile or using mass transportation depends on the relative times, relative costs, and relative levels of comfort and convenience offered by the competing travel modes. Generally, rapid transit and commuter railroads are cheaper than automobiles, and permit the use of the family car by other members of the household. On the other hand, automobiles go virtually any place, at any time. They do not require adherence to a schedule.

In two other aspects mass transportation can sometimes be superior, though sometimes inferior, to driving. One is comfort. Because they are modern, clean, and air-conditioned, as well as involving less strain than driving in heavy traffic, some commuter railroads offer more comfort than automobiles. On the other hand, standing in a crowded car for the entire trip on a rapid transit vehicle may make heavy traffic driving a good deal more appealing. Traffic moves slowly, but at least automobile commuters are seated.

Relative travel times can also favor either mass transportation or automobile. For particular destinations—notably those in the downtown areas of large cities—overall mass transportation travel times may compare very favorably with those of automobiles. For travel between outlying areas of cities, however, mass transportation rarely competes with the automobile. Frequently, direct public transportation lines do not exist. In such cases, mass transportation simply does not provide an alternative to driving.

It is the sum of these calculations that dictates the individual's choice. For some, one aspect may be particularly important, while for others, another may carry disproportionate weight. But overall, there is a remarkable consistency in the response to the alternatives presented. Where mass transportation is a good alternative to driving, people use mass transportation. Where it is not, they drive.

Patterns of choices

Because commuters make consistent and rational decisions on their modes of travel, the patterns of automobile and mass transportion use across cities are clear. Thus, for travel between outlying areas and downtown—where mass transportation is competitive in time and cost with driving—use of transit and commuter rail lines is heavy. In Chicago, for example, fully 87 per cent of the people going to the downtown area during the morning rush period get there by commuter railroad or transit. Of the remaining 13 per cent who drive, about half do so only because they need their cars during the day. In New York, the relative proportions are even more ex-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

treme. There is no mystery to this. In Chicago, rush hour driving to and from downtown is difficult, and "Loop" parking costs are high. Mass transit and commuter rail services are both good. In New York, the mass transit and commuter rail services are even more comprehensive than Chicago's and driving at rush hour is impossible. That few people drive is a foregone conclusion.

In cities with less developed downtown areas, lower parking costs, less highway congestion, and smaller transit systems, automobile driving to central areas comprises a much greater proportion of the travel that is directed downtown. The relative costs and benefits favor highways, and commuters respond by driving.

The patterns are very different for travel between areas that are not downtown. The available mass transportation service is usually restricted to buses, which are rarely time competitive with automobiles because they use the same right of way and make stops. In costs, peripheral travel also favors the automobile. Because parking is available and cheap (mostly free) outside of downtown, automobile costs remain near operating costs. These costs are close to those of mass transportation.

The results are clear. Because peripheral travel is more favorable to automobiles than is downtown travel, both in elapsed travel time and in cost, the actual proportion of travel by mass transportation on the periphery is much smaller than that to dowtown. In fact, while all segments of the population use mass transportation for downtown travel, peripheral mass transportation mainly serves persons who cannot drive or afford cars, or who have limited access to them.

The key to success: demand

If relative times, costs, and comfort are crucial to commuters, passenger volumes are critical to mass transportation operations. Whether it be rail rapid transit or commuter railroad, mass transportation cannot exist unless it carries a very large number of passengers. The absolute lower limit for economic investment in surface rail routes is about 5,000 passengers a day, while that for a subway is in the vicinity of 40,000.

These lower limits determine directly where transit and commuter rail lines can and cannot be built. They almost automatically rule out successful rail transit in metropolitan areas of less than a million inhabitants. Cities below this threshold-size simply do not have corridors generating enough travel demand to make commuter railroads or rail rapid transit a good investment. However, even in cities with populations well over a million, mass transportation cannot be a substitute for highways or an instant panacea for transportation problems. Even cities as large as Chicago, Philadelphia, San Francisco, and Boston generate enough traffic to support rail

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

transportation lines only in certain corridors. In all of these cities, the only type of rail transportation that can economically survive is the type that serves travel demands from outlying areas to the city center. Demand for other kinds of travel is simply too diffuse to support rail lines. With present-day technology, such demands can economically be served only by highways.

In certain other cities, also well above the 1 million threshold, even such central-area-serving lines are not assured of economic success. In Washington, D.C., with a metropolitan area population of over 2 million persons, laws restricting the heights of downtown buildings have made the central area so diffuse that the possibilities for economically viable rail transportation are greatly limited. Los Angeles is similar. It is difficult even to find a real "downtown" in Los Angeles.

The only city in the United States that has the density to support a general crosshatching of rail transit routes is New York. The travel demands in all directions are so incredible, over a large area, that parallel rail transit lines can exist only blocks away from one another. There is no other city in the United States, however, in which this condition is presently approached or is likely to be approached in the near future.

Supply: a key to the shape of a city

The law of threshold demand for rail transportation lines determines where such lines can succeed. This law, however, has an important converse. Just as rapid transit and commuter railroads cannot exist without high trip-making density, so high trip-making density cannot exist without rapid transit and commuter railroads. Cities such as New York and Chicago simply could not support the economic activities of their central areas without rapid transit and commuter railroads.

As before, the reason narrows down to travel volumes. When volumes of travel are high, rail mass transportation lines can do jobs that highways cannot even attempt. Again, consider the actual numbers. In Chicago, during the three-quarter hour period between 4:45 PM and 5:30 PM, the six rail transit lines and eight commuter railroads carry nearly 120,000 passengers away from the downtown area. Carrying this many persons in the same time by automobile, with typically existing passenger loads per car, would require 70 express highway lanes. Chicago is already thought to be well supplied with express highways, having 29 limited access lanes leading out from downtown. The addition of another 70 would just about blanket the inner city. In New York, the idea of doing the mass transportation job with highways is even more ludicrous. Commuter rail lines and transit carry more than 1.3 million passengers

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to and from jobs in midtown Manhattan every day. This job just could not be done with automobiles.

The implications of these figures are dramatic. Plainly stated, if a city wishes to have a well-developed and dense downtown area, it must have high-volume transportation lines to serve that area. The downtowns of Detroit and Los Angeles have been hurt for years because those cities have no rail transportation routes serving downtown. Chicago, Boston, Philadelphia, and New York all have such transportation facilities, and all have been experiencing tremendous building booms in their downtown areas during the postwar years. Perhaps the most dramatic indication of the effects of mass transportation facilities is seen in those cities that did not possess a rail transit system, but have recently built one or are presently doing so. In Toronto, an unparalleled building boom along Yonge Street coincided with the construction of the Yonge Street subway line. This one line completely altered the focus of the central area of the city. Previously concentrated around Queen and Yonge, new high-rise developments have sprung up outside the central core at key stations of the subway.

In San Francisco, the construction of the Bay Area Rapid Transit System is causing a similar transformation to take place on Market Street. This street of recently-faded elegance is currently experiencing a resurgence that will shortly make it regain its place as the most successful commercial street in the city. The cause: a rapid transit system that will not even carry its first passenger for another two years.

Montreal is yet another example of the tremendous response of real estate values to improved mass transportation facilities. There, too, the spectacular growth of the downtown area is associated with construction of a new mass transportation system.

All of these examples illustrate the close relation between the shape of the city and the capabilities of its transportation system. Just as early railway lines dictated the locations of city suburbs 150 years ago, the placements of highways and mass transportation lines mold cities today. For the most part, in our larger cities, this means high volume transportation lines serving the city center and express highways serving the rest of the city as well as the downtown area. In some cases, there are no high-density travel facilities. In those cases the center of the city is badly hurt by that lack. In the case of New York City the whole inner city is so dense that within Manhattan only a small fraction of the transportation job is done by highways. But now, as in the past, the relation between dense travel needs and high-volume travel arteries holds. Cities with high-density cores have transportation systems capable of handling high-density travel. Conversely, cities without high-density travel transportation systems cannot have high-density cores.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There is, then, an economic rationale for an appropriate mix of mass transportation and highway facilities in our large urban areas. It is also evident that commuters make logical, reasonable, and largely predictable choices of transportation modes for accomplishing their various trips. Further, these reasonable choices of travel modes indicate the types of travel needs that should be served by highways and the types that should be served by rapid transit systems and commuter railroads. What has yet to be shown is the reason why, in spite of economic rationality and indeed utter economic necessity, the rapid transit systems and commuter railroads of this country have generally performed so miserably in the postwar years. Presumably, where there is economic necessity, and particularly where there is a natural monopoly, there is money to be made. However, this natural monopoly has conspicuously not made money nor broken even. Why not?

There are a number of reasons that tend to be somewhat different for rapid transit systems than for commuter railroads. Similarities outweigh dissimilarities, however, and the changes that will revolutionize both commuter railroads and transit systems will be remarkably alike.

The problems of transit systems

The crux of the transit problem can be summed up in two words: comfort and price. There is a somewhat peculiar notion held by many that the modern urban American should be delighted to use mass transit—*any* mass transit—simply because it is cheaper than driving. The overwhelming contrary evidence provided by the amount of highway travel in our cities confuses these people who regard such behavior as economically irrational. Further, they blame this "irrationality" for creating the commuting problem.

On the contrary, it is preposterous to expect anyone with reasonable income, attractive home, and air-conditioned office, to submit to rush hour jostling, crowding, and standing in transit cars that combine inadequate heating and nonexistent air-conditioning with poor riding characteristics. People willing to pay a high premium for their comfort at home and in the office, will pay just as much for comfort traveling between them. And when they are faced with the choice between being herded like cattle into a rush-hour transit vehicle, or driving a well-engineered, quiet, and comfortable automobile, the decision is an easy one in spite of additional expense. In fact, only exorbitant parking costs and extreme traffic congestion can guarantee the continued voluntary use of run-down and unattractive transit.

The second reason for transit difficulties—and ultimately the more

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

important one—lies in pricing. The pricing policies of our transit systems could hardly be worse. Not only are fares set at levels that virtually guarantee that transit companies will teeter on the edge of bankruptcy, but they are set with little regard for the most elementary principles of economics.

The price level

The major pricing problem results from the fact that almost universally *the fares charged on rapid transit systems in the United States are not too high—they are too low.* For political and other reasons, transit fares are consistently maintained at levels below those necessary for economic operation. The results are disastrous. Faced with persistent shortages of cash, the transit companies are simply unable to function properly. They are unable to provide modern equipment; they are unable to maintain structures and roadways; they are unable to provide protection against crime for the passengers on their property; they are unable to support proper research facilities; they are unable to provide good service. In short, they are not able to perform adequately any of the necessary and normal functions of an up-to-date industry operating in a technologically advanced society.

At first glance, placing the blame for this multitude of problems on the level of the transit fare alone seems an unwarranted, and simplistic response to an extremely complex situation. To challenge such a bold statement of causation, one might be tempted to ask some of the following questions:

1. If fares were actually raised to "economic" levels, how high would they be? A dollar for a trip at present costing twenty-five or thirty cents?
2. How can higher fares answer the problems of transit when the usual postwar pattern has been price rises that lead to less patronage, followed by cuts in service that lead to higher prices, etc.? Can this vicious spiral have any end other than the ultimate bankruptcy of the transit company?
3. If prices are raised to "economic" levels, how will it be possible to provide cheap transportation for the poor people who need it most?
4. Finally, isn't transit inherently *uneconomic* because much of the equipment must necessarily lie idle—and not earning revenue—during most of the day?

Each of these questions is reasonable on the surface, but each illustrates one of the common mass transportation myths. Let us consider them in order.

1. *The incredibly high fare myth.* Rapid transit fares must gen-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

erally be higher—considerably higher than at present—if the transit industry is to provide the type of transportation that a modern society demands. In absolute terms, however, the necessary price rises are not very large.

Suppose a transit company raises the fare from twenty-five to forty cents. For the great majority of individuals, this extra fifteen cents per ride is not very significant. To the transit company, however, such a fare increase may be very important. Even given the usual patronage response to transit fare increases, this 60 per cent price rise should add to total revenue about 40 per cent.

For most transit companies such large revenue increases are particularly important and can represent the difference between chronic cash shortages and enough revenue both to allow good service and to encourage investment capital. At present, there are few large rapid transit systems that earn less than 80 or 90 per cent of their operating costs. Therefore, price rises of the magnitude proposed—small in absolute value but large in percentage—can make the difference between insolvency and profitable transit operation.

Fares of a dollar for transit? Given their monopoly position, some companies could conceivably charge that fare and make an exorbitant profit. But operating a transit system is just not that expensive except for unusually long trips. Much more modest fares can assure both deficit-free operation for the present and a solid financial base for the future.

2. *The price-patronage-service-spiral myth.* This myth has its roots in the mistaken assignment of a causal relation between two largely independent postwar changes in urban transit. One, a secular change from lower to higher fares; the other, a dramatic decline in the use of certain types of transit, attended by corresponding service reductions.

Although changes in fare levels have had some influence in determining transit use, their role has actually been quite minor. The automobile has been a much more powerful determinant. The great change in the use of mass transportation since World War II was almost entirely the result of the new availability of cheap and convenient automobiles, and of the advent of urban expressways. During World War II, whether convenient or not, mass transportation had to be used because of gasoline rationing. During the decade of the Great Depression, only a small proportion of the population could afford automobiles. Of course, at no time until after the war did more than a very few urban expressways exist. The result was that, after the war, the change in auto ownership that normally would have been spread over several decades, actually took place in little more than one. At the same time, a massive urban expressway building program took place. The overall con-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sequence of this dual development was that suddenly the bulk of the population was provided with a relatively cheap and very convenient means of transportation that it had never before possessed. Correspondingly, the mass transit and commuter rail companies found their role rather abruptly changed from that of providing most urban transportation services, to that of providing only those services that could compete with the automobile.

Where did the changes take place? Not surprisingly, travel *not* directed toward central areas was particularly affected, especially bus transportation. In the decade following World War II, bus use in major metropolitan areas dropped by roughly a third. The drop in transit use took place just exactly where the automobile could best compete.

At the same time, however, rail transit use to and from central areas fell much less. The slow fall in such transit use continued until the early 1960's when the trend changed to what has been a continuing moderate *increase*. Again, the change was what one would expect. Where rapid transit can compete with automobiles, routes on exclusive rights of way providing competitive travel times to areas with high parking costs, the advent of mass automobile transportation has had only a minor effect. Now that almost all people who want automobiles can have them, the normal process of growth in population and travel is reasserting itself in increased rail transit use.

Why have fare changes played only a minor role? Because other criteria influence choices between travel modes. Variables such as parking costs, relative travel times, and comfort of the transit vehicle, usually are more important than the actual transit fare. Parking costs of two dollars a day at a given downtown destination clearly must dwarf the effects of a ten or fifteen cent transit fare rise on travel mode choices. Similarly, if commuters are willing to spend at the rate of only half their wage rate in order to save commuting time, (i.e., a person earning six cents a minute willing to spend three cents a minute in order to save time), then the value of only a few minutes' time differential between travel modes will already equal the total transit fare, not to mention any marginal increases in it. Generally, differences in elapsed times between travel modes are not measured by only a few minutes; they can vary by twenty minutes, a half hour, or more. The effects of these differences between travel modes minimize those of potential fare changes. Finally, as indicated above, if comfort can have value measured in dollars per trip, then the actual transit fare becomes relatively insignificant. An unpleasant transit ride at a quarter is just as unpleasant at thirty-five cents.

A price-patronage-service-spiral does *not* represent reality in rapid transit. The role that transit plays in serving the transportation needs

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of a city depends far more on the nature of the city and of the transit system, than on the fare. If transit is comfortable and convenient, people will use it either at an economic fare or at an artificially low one. Otherwise, they will use it only if they have to. But either way, the amount of the fare will have only a marginal effect on the use of the system.

3. *The cheap transit myth: who pays and who benefits?* The cheap transportation myth is the most unfortunate of all the myths associated with mass transit because the policies that come from it have results exactly opposite to those intended. Virtually the only rationale offered for maintaining transit fares below market levels is to provide cheap transportation for poor people. In fact, what we do through artificially keeping fares low is to cause tremendous underinvestment in mass transportation facilities. Because the investment return is low or negative, it is exceedingly difficult to attract investment to mass transportation. The result is not cheap transit, but, for many, no transit at all.

Watts provides an unfortunate illustration of this. There, one of the major complaints of the populace was, not so much that transit prices were too high, but rather that good transit service did not exist. If a car was unavailable it was impossible to get much of the Los Angeles area in reasonable time. Examples were cited of relatively simple trips taking more than two hours by public transportation. This lack of mass transportation facilities contributed in large measure to the lack of job opportunities available to Watts residents. And, in turn, the lack of job opportunities played a role in providing the conditions that led to the disturbances. Low transit fares did not themselves cause the riots in Watts. But the misguided philosophy behind low fares—in its perverse actual function—probably was not an insignificant factor.

The major effect of low fares is lack of public transportation, but there is another implication of the low-fare theory that is just as perverse. Although most persons favoring cheap transportation for the poor, specify not only that it be cheap, but also that it be of high quality, in actuality this turns out not to be the case. Cheap transportation for poor people almost invariably means poor transportation for poor people. In reality the poor are forced to submit to discomfort and bad service, while the rich drive their automobiles.

Why must this be the case? Is there any reason to believe that the less affluent members of our society enjoy standing any more than the others? Any person who speaks with transit users will soon find that concern for comfort is largely independent of income. While many transit users cannot afford the luxury of an automobile, almost invariably they would be willing to pay what it costs to provide them with a seat on transit. Unfortunately, we

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

do not offer them that choice. The public uses the transit that is provided, and pays the price that is set. There is no recourse; they therefore must endure.

The final blow to the cheap transit for poor people policy is a standard economic argument. If subsidization of transportation for the poor is an appropriate public policy, then why not do it directly? Why should all persons using transit be subsidized with scarce public resources to help the few who actually need subsidy? Indiscriminate subsidization of all for the benefit of the few is an extremely expensive type of public aid. The money that is used to subsidize the transit trips of people who can well afford the service themselves could much better be used for other purposes.

By its very nature, mass transportation will always be cheap transportation. Economics dictates that moving people in groups measured in hundreds costs less than moving them in groups of two or three. However, only if we charge for transit what transit costs can we provide cheap and good transportation—for all the people.

4. *The inherent diseconomies myth.* This myth is included so often in discussions of mass transit that it should finally be laid to rest. The argument states that the extreme "peaking" characteristics of transit demand—high demand at rush hour, low demand otherwise—means transit vehicles cannot pay their way. Transit cars cannot work enough hours during the day to make their use economical. Such is the argument.

Does constancy of use really determine value? Are restaurants "inherently diseconomic" because they are busy only at meal times? Are ski resorts poor investments because they are used only for a few months during the year? Clearly, these enterprises can be perfectly good investments. Transit is the same. Whether any of these investments provides a good return on capital depends, not on the evenness of demand, but rather on the relation between the demand for the service and the costs of supplying that demand. In the transit industry there are many places where demand for the service is more than enough to justify providing the supply.

The price structure

The pricing problems of transit begin with the overall levels of fares. Unfortunately, they do not end there. Problems of inappropriate internal fare structures plague the industry, compounding the difficulties already caused by artificially low overall prices.

The crux of the internal price-structure problem lies in the single fare system. The majority of our mass transit systems charge the same amount for six blocks or sixteen miles. This is economically inefficient because it automatically requires that short trips sub-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sidize long ones. Because the fare is set near the average cost of providing service both for long and for short trips, the persons making short trips pay more than it costs the transit company to provide the service, while those taking long trips pay less. This may be agreeable to the person who travels for some distance on the transit system, but it causes a considerable economic loss both for the potential short-distance transit user and for the transit company.

It causes a loss to the potential short-distance rider because many trips that would be economically worthwhile at a fare approximating the cost of providing the service are frequently not worthwhile at that cost *plus* the price of subsidizing longer trips. For example, a six-block trip on existing service may well be worthwhile at the twenty-five cent cost of providing that service, but not at the average forty cents per ride cost of operating the entire transit system. Therefore, persons who would potentially use transit for short trips walk or use other modes of transportation. For no good economic reason, short trips are priced both above their cost and above their value to potential transit riders, thus causing losses to all concerned.

While the single fare system causes the transit user to suffer only when contemplating a short trip, the transit company loses on both types of trip. Not only does it lose revenue by overpricing short trips but by underpricing long ones as well. Just as it costs more to provide transportation for long trips than for short ones, that transportation is correspondingly worth more to the persons who wish to use it. Therefore, if transit companies used rational pricing policies, they would charge higher fares for longer trips. Unfortunately, they do not. The transit companies fail to take advantage of the nature of their demand, and in so doing, contribute to their dismal revenue situation.

Before totally condemning transit company pricing structure policies, one should say a word in their defense. The single fare system is not an accident. Such a fare system has an advantage—an advantage that transit companies have been loathe to lose—ease of collection. Once the single fare is paid, riders require no further surveillance. No tickets are sold, and no checking is necessary to see that the passengers go only a prescribed distance. These savings in simplicity and in ticket-policing manpower can be considerable. In New York, for instance, where 4.4 million passengers are carried daily by the rail transit system alone, graduation of fares would be extremely expensive to manage with manual ticket handling.

Granted this, however, even where the transit companies can easily differentiate fares, they rarely have done so. It is noteworthy that no United States city having both rail and bus transit has a base fare differential of more than a nickel between types of service, even though rail transit service is generally faster than bus and the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

average trip length is much greater. Base fare differentials and more than nominal transfer charges between buses and rapid transit are obvious places for rationalizing the pricing system. But even this has not been done.

At this point in the era of automation, the problem of expensive labor for collecting fares really becomes academic. The technology for automatic fare collection is now so easily available and relatively so cheap, that there is no need for human fare collection or direct ticket surveillance at either end of the trip. Any economic advantages that the single fare system might once have had are now completely negated by the potential of our machines. By now the economic benefits of the single fare system are far outweighed by their costs.

Commuter railroads

The postwar experience of commuter railroads has been much the same as that of rapid transit systems—an initial and considerable drop in patronage followed by small further losses until the early 1960's. Since then, the experience has been mixed, with some commuter rail lines losing yet more passengers while others have been gaining them. This postwar period has also seen fare increases to commuters and dramatic rises in labor costs to the railroads. The period has involved minimal changes in the types of service provided, and little money has been invested in modernization and automation. Management has generally regarded commuter service, at best, as a holding operation.

The reasons commuter rail systems have failed to keep in step with the times closely parallel those of transit. All of the major transit problems—old equipment, inadequate housekeeping, artificially low fares, lack of investment capital, etc.—have their analogues in commuter railroad operation.

As in transit, the major problem is price. The authorities that determine pricing—in this case, generally the state regulatory agencies—have consistently allowed fares to lag behind the cost of providing service. The familiar consequence is that the railroads studiously avoid sinking any more scarce money and talent into their commuter operations because they are deprived of possibilities for earning a reasonable return on capital. The service therefore deteriorates from bad to worse.

Completion of the commuter railroad problem picture adds only three features not common to transit. They are work rules, taxes and terminal charges. The work rules restrictions that make it difficult for railroads to take advantage of labor-saving equipment on their cross-country operations also hamper and cost them dearly in commuter service. The old New Haven (now Penn Central) commuter system, for instance, is unkindly but accurately characterized as

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the largest retirement home for old railroad men in the country. This is not a unique situation. In many other places, management is hamstrung in its efforts to eliminate jobs that can be done by machines more efficiently and cheaply. As long as these job restrictions remain in force, progress in making commuter rail operation more economical will be effectively delayed.

Taxes have long been a bugaboo of railroad men. Railroad management argues that it is unfair for highways to get tax-free rights of way while railroads have to pay. They think that many communities regard railroads as convenient public tax preserves which are available and suitable for exploitation. Presumably, because railroads cannot move out of town, taxes can be raised with little fear of retaliation.

In individual cases, the problem of taxes is probably one of genuine financial importance. Generally, though, communities are sufficiently concerned about loss of commuter service that they keep taxes within reasonable bounds. Taxes play a relatively minor role in the financial difficulties of commuter railroads. The roots of the problem really lie elsewhere.

The last of the problems unique to commuter railroads is the problem of exorbitant terminal charges. Though few people are aware of this problem, it is nonetheless one of the most serious obstacles between a number of commuter railroads and the goal of profitable operation.

In large measure, the terminal charge problem is a legacy of the days of heavy cross-country rail passenger traffic. Most of the great passenger terminals of this country were built when this traffic was growing and expected to continue to grow. Normally they were built by corporations separate from the railroads (but often owned by them) and paid for through leases stating that capital and operating costs be shared by users of the facilities on a per car basis or on the basis of ticket sales. Because the passenger business was regarded as dependable and was expected to grow indefinitely, both the leases and the payoff times of the bonds were exceedingly long.

Disaster struck when the intercity rail passenger traffic dried up during the postwar years. In a very short time, use of the vast old terminals dropped to a fraction of what it had been. By the early 1960's, virtually all that was left was the commuter traffic. By the terms of the leases, however, this traffic still had to pay the complete capital and operating costs of the stations. And so the charges sky-rocketed. Earlier they had been quite reasonable; now they became absurd. At present, per car charges may range as high as $50 per car every time the car enters or leaves the terminal. This charge alone can amount to as much as forty cents per one-way passenger ride, and can consume a major fraction of total revenue.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The whole situation is obviously preposterous. The old mausoleums should have been torn down and their capital loss written off long ago. There is no economic reason why commuters should continue to pay for the mistakes of an earlier generation.

Legally, however, this problem is an exceedingly difficult one to solve. In extreme circumstances, one might think that condemnation and demolition by the cities might be the only answer, with newer and more appropriate facilities provided for the commuters. One hopes, however, that another development might help to make this unnecessary.

In the last years, the land upon which these stations are located has in many cases become so valuable that it is paying the corporations owning the stations to tear them down and sell the air rights for office building development. This is so profitable that it can go a long way toward providing a painless way of paying off the bonds, and getting rid of the unneeded station structures as well. This may well provide an avenue of escape from the problem. The only critical concern, then, will be that the station-owning corporations are not allowed to take advantage of the situation, making windfall profits on air rights but still squeezing every last penny out of commuter revenue. Since it is not in the interests of the railroads to continue paying these charges, there would seem to be reasonable grounds for hope that through economics alone, this latter result will not be the case.

Mass transportation: future in the present

Altogether, the serious problems of our big city mass transportation systems are soluble. The economic demands for service exist, and with proper attention given to pricing, comfort, etc., the mass transportation industry will begin to do its job in a manner befitting economic enterprise in the latter part of the twentieth century. This holds true for both rapid transit systems and commuter railroads.

In many places, the stirrings of a new mass transportation future are already being seen. In San Francisco, in particular, there is real attention being paid to the things that matter in mass transit. In the Bay Area Rapid Transit District, the new service will be frequent and fast. The cars will be clean, modern, and comfortable with no standees. The fare will vary appropriately according to distance. There will be automatic fare collection machinery. Transit vehicles will be automated. All these features will contribute to making a system that should be a prototype for twentieth century transit.

In other cities, too, the changes are beginning. In Boston, a much larger system is getting out of the planning stages, and the present system is being substantially upgraded through new equipment and long overdue renovation and modernization of stations.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In certain stations it is now a pleasure rather than an obscene pain to enter the Boston subway. In Chicago, more transit lines are being built, and the new equipment there is comfortable, smooth riding, and air-conditioned. Cleveland and Philadelphia are also building new lines and buying new equipment. Other cities are in varying stages of designing completely new transit systems. Even New York, the king of transit and of transit problems, is advancing. There, too, new equipment is slowly spreading through the system. Different types of communications for better service and safety are being tested and adopted. New lines are being built. All over, the transformation in transit is beginning to get under way.

In commuter railroads, the principles of up-to-date operation are also beginning to be understood. Certainly the outstanding example of a railroad recognizing the potential for commuter operations is that of the Chicago and North Western Railway. In the late 1950's and early 1960s, this railroad took what was regarded as a large gamble in buying approximately 40 million dollars worth of new equipment to entirely replace its old fleet of commuter trains. Because the service was, at the time, losing as much as several million dollars a year, the investment must indeed have appeared to be a poor one. However, use of this new equipment, combined with a concerted effort to provide attractive and dependable operation—at higher fares—provided the basis for an almost complete turnabout both for the railroad and for its commuters. In 1963, shortly after the bulk of the new equipment had been acquired, North Western commuter operations went into the black for the first time in years. Growth of passenger loads began and has continued at rates now averaging 5 per cent a year. The North Western commuters, once a typically discontented and bitter crew, now rave about their service. They would not dream of switching from the North Western.

The North Western story has an interesting sequel. In December, 1967, the railroad petitioned the Illinois Commerce Commission to raise fares. The fact that this was done is not in itself particularly interesting. What is noteworthy was the reason—not that it was losing money, or that it was about to go bankrupt, or any of the typical reasons that are offered by a desperate railroad petitioning to raise fares, but that the service was not making a high enough return on capital to be "fair." The nature of this petition for fare increase shows perhaps more than anything else, that the North Western Railway has learned both its economics and the nature of its demand.

Other commuter rail operations are not far behind. In Philadelphia, the authority operating commuter railroads found, and was only somewhat surprised to find, that considerable fare rises, combined with increases in the physical attractiveness and comfort of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the service, led to increases not decreases in ridership. Similar developments have taken place elsewhere. The commuter railroads are increasingly finding that the regulatory agencies will approve higher fares if they are combined with improvements in the quality of the service. They are finally learning that benefits from better service accrue to all concerned.

The government in mass transportation

There is no question that the federal government plays an increasingly large role in furthering the changes in mass transportation. Many of the improvements that show that mass transportation can be good business are financed, in part, by federal demonstration and other grants. Much of present-day mass transportation research is financed, directly or indirectly by the federal government.

With the tremendous lag that has characterized the development and implementation of new mass transportation technology, this governmental activity is hardly out of place. The whole mechanization and automation revolution that has transformed vast sectors of our economy has just begun to touch mass transportation. And mass transportation is an ideal place for it. The moving of large numbers of people has enormous potential for being a much more capital intensive business. Typical transit companies now spend about 70 per cent of their budget for labor. This can and should drop dramatically. The returns to investment in mass transportation technology research and development are very high.

Unfortunately, the ability of individual firms to underwrite the necessary expenditures is limited. No mass transportation company alone has the resources to undertake the development and testing of new technologies that individually may or may not work out. Prototypes of new—and often good—systems tend to be very expensive. For this reason, government intervention through sponsored research and demonstration grants is enlightened and rewarding social policy.

There are other good reasons for governmental intervention. One arises from the existing, typically fragmented, nature of mass transportation services. Large cities may have any number of firms and authorities providing service, but little coordination either in schedules or in fares. Because just such coordination of fares and services is exactly one of the really important necessary improvements in big city mass transportation, positive governmental policy can do much toward encouraging the cooperation and coordination of reluctant mass transport sovereignties.

Governmental intervention, even in the form of direct capital grants to mass transportation agencies, can also be justified on reason-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ably good economic grounds. There is a well-known economic argument that, if the necessary capital costs of a system are high, though operating costs are low, then the maximum benefits to society as a whole may be gained if the system is priced to cover only operating rather than total costs. The example that is usually given is that of a bridge, the capital and depreciation costs of which are a dollar per crossing, but the marginal costs to the operator of that crossing are only ten cents. In order for the bridge as a whole to be a profitable investment to a private concern, the toll must clearly be set at $1.10 or more. From society's point of view, however, even if the bridge can make a profit at $1.10, potential benefits are lost with such pricing, because potential users, for whom crossing is worth more than a dime but less than $1.10, are effectively barred from using it. Such people would be willing to pay at least what their use of the bridge costs the operator, but not that marginal cost plus capital and depreciation costs. The operator, therefore, loses the possible revenue from the crossings that are not made, and potential bridge users lose the benefit of crossing the bridge.

A parallel argument applies to mass transportation, where the minimum investment in a line often necessarily creates unused capacity. When such unused capacity exists, benefits to society are maximized if use of the facility is priced only high enough to cover operating costs, rather than operating costs plus capital and depreciation as well. Maximum benefits are conferred to society if capital and depreciation costs are paid for by tax revenues.

In effect, this is what government capital grants do. They provide capital investment monies at little or no cost to the mass transportation operator, and oblige his fare box revenues only to cover the costs of operating the system. Such an arrangement can work directly toward maximizing total economic benefits to society.[1]

A further point should be considered. There is a substantial amount of casual evidence to support the popular contention that mass transportation management, both transit and commuter rail, is conservative, old-fashioned, and extremely resistant to change. To the extent that this is true, regardless of who is to blame, the infusion of federal monies into the industry must certainly be a

[1] There is yet another argument that is frequently used to justify governmental subsidy of mass transportation systems to the effect that greater use of mass transportation means less highway use, lower congestion, and reduced costs to persons remaining on the roads. To the extent that underinvestment in mass transportation means highways try to do the mass transportation job, this is probably a reasonable justification. It should not diminish, however, the fact that the "social benefits" argument is not necessary to justify investment in mass transportation. Investment in mass transportation can justify itself on exactly the same basis as investment in any other business in the economy. This is an argument that is generally *not* made, and in terms of standard economics it is certainly the stronger one.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

salutary development. If nothing else, federal aid to mass transportation will hasten the day when the owners of mass transportation capital realize the economic potential of their property. When this happens, they will no longer believe that the results of poor management can be tolerated, and they will end such management. When that time comes, the transformation of mass transportation will have come of age: the forces causing it will be self-sustaining and irresistible.

The farther future

In recent years, the public has been regaled with numerous proposals and some prototypes for futuristic, vastly different transportation systems than those in use today. These systems employ devices ranging from air cushion glideway vehicles and monorails to various flying objects, and bullet-shaped projectiles traveling through evacuated tubes. Most of them have a high degree of automatic operation through central computer control. What are the prospects for these systems, and how soon is their adoption likely to come about? Bluntly stated, the answer to this question is that the prospects for radically different transportation systems generally do not appear to be very good. Even those that are potentially workable will require considerable time before coming into general or even limited use.

The reasons for this lie not nearly so much in the technical feasibilities of the proposed systems as in the formidable nature of their present-day competition. Much as it may appear to the contrary, one could hardly imagine cheaper or more simple systems of moving people and goods about cities than the ones we presently have. For the jobs that they do, both highways and rail transportation lines are exceedingly simple, cheap, and efficient.

Consider, for instance, the nature of a highway. Building a highway in essence, requires only smoothing out the earth and putting down a flat strip of concrete. When repairs are needed, they consist of filling holes with yet more concrete, or at worst putting on a cover of asphalt. Bridges, signals, guard rails, painted lines, etc. are all incidental to the basic nature of a highway. Rail lines are not much different. Where highways are flat concrete, a rail line is merely two strips of steel also on a smoothed right-of-way. The rails are kept a given distance apart by wooden or concrete ties, and the whole affair is set on a gravel road bed. The absolute height of simplicity. Even the vehicles that use these two types of facilities are not by nature particularly complex. They are self-contained, use cheap propulsion, and have relatively simple systems for determining their speed and direction of travel. Further, they are fast, dependable, and minimally affected by adverse weather.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Together, these complementary systems do a phenomenal job. Between the two of them, they provide maximum flexibility of destination and timing for travel of individuals, combined with highly efficient mass transportation where travel densities are such as to make individual travel by automobile uneconomical. This combination is hard to beat.

But beat it is exactly what the new transportation systems will have to do, if they are to come into general use. They will either have to provide more cheaply the same transportation services presently offered by highways and conventional mass transportation lines, or they will have to provide much better services appropriately priced.

In this respect, the proposed new systems do not appear to do very well. Aircraft, for example, can almost immediately be eliminated from consideration for intracity transportation, if only because of the high expense of short distance flight. No present-day flight system comes close to the economy of the automobile nor does any seem likely to do so in the near future. Even in the best possible contemporary flight transport situations—helicopters from airports to downtowns—operators have difficulties making ends meet.

Even if flying itself were cheap, there would be the problem of traffic control. Although it may not appear very difficult to keep flying vehicles apart given our present day computer technology, it is actually a tremendous problem. At present, F.A.A. air traffic regulators have difficulty keeping aircraft numbered in the hundreds from colliding in areas encompassing thousands of square miles. Imagine how that problem would compound with a hundred thousand or so vehicles in the air over a city! Presumably, the problem can be solved. But the solution will not come soon and it is unlikely to be cheap when it does.

The problem of collisions will also be a major one for proposed ground systems involving computer rather than human control for large numbers of vehicles. In concept, the engineers have some idea of how such a system might work, but physically they have not even begun to approach the job. There is no obvious reason for believing that such systems cannot be devised; it is simply a matter of cost. There is little reason to believe that such systems can be better investments—in terms of costs and benefits—than the ones we have now. For the present, computer control will go into more basic areas such as synchronized street signals and automatic driver information systems. These are the types of applications that are much more relevant to our present computer abilities.

Air cushion glideways, monorails, and vacuum tubes also have their defects. Although they have captured the public imagination, monorails are slow, have serious problems of stability and switching, and are expensive. After substantial prototype experience they have

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

yet to demonstrate a single advantage over systems with two rails. Vacuum tubes are much worse. There is little doubt that they involve stunning capital costs of digging deep tunnels with air proof walls. Friction will probably be a major problem, as will be the close tolerances that must be observed in construction and maintenance. Air cushion glideways, which probably have more potential than the other currently popular futuristic travel modes, are in the relatively early stages of development. When and if air cushion vehicles are proved successful, it is unlikely they will quickly replace present rail or highway systems. Rather, their very high speeds—a minor benefit for travel within cities—will allow development of an entirely new series of yet farther out suburbs than those of today.

Revolutionary and radically different transportation ideas should by all means be encouraged. It does not seem totally improbable that one day a technological breakthrough or a revolutionary idea may make possible a new system that can economically replace our travel modes of the present. The likelihood, though, does not seem to be too great. Although support of research for radically different systems is certainly appropriate, we should examine technologies and proposed systems very carefully and with a jaundiced eye, before becoming unwarrantedly enthusiastic or overly committed. The implementation of radical plans is still largely over the horizon. It is a somewhat nearer future that should command our major attention: that is the future we will design, and that is the future in which we will live.

The actual transformation

What, then, are foreseeable changes in our mass transportation systems? For the next two or three decades, it seems far more likely that evolutionary forms will develop on our present basic travel modes, rather than radically different systems. The evolutionary changes that do take place will be those that parallel changes in other parts of the economy. In rail systems, probably the biggest single change will be that from human to automatic operation. This will simply mirror a change that has already taken place in the vertical transportation industry, the elevator. The technology is there, the economics are right, and the application simply needs to be made. There is very little intrinsic difference between stopping an elevator smoothly within a twentieth of an inch vertically, and stopping a transit vehicle in a similar way horizontally.

The second major change that will take place will be in automatic ingress, egress, ticket sales, and ticket processing. Again, this is a type of automation that is also beginning in other industries. Banks, brokerage houses, and parking lots, for example, are rapidly adopting these automated operations. So will mass transportation.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A third change will be in remote surveillance to combat crime. This will also parallel the changes taking place in many stores and public buildings. As time goes on, the relative costs of having policemen on the spot, compared with those of remote surveillance, good communications, and mobile police, will favor the latter over the former. Such surveillance systems should dramatically lessen problems of crime associated with mass transportation.

Finally, there will be a great change in the physical attractiveness of our mass transportation systems. Our mass transportation industry is far behind the rest of the economy in providing the physical amenities that our affluent society expects and demands. The industry cannot assume that it does its full job simply by moving people from place to place. At least as important is the manner in which the people are moved. This is a lesson the automobile industry learned long ago; mass transportation has only to follow its example.

When these changes are made, mass transportation in this country will undergo a real transformation. It will not be a revolution because the basic structure will remain essentially the same. In every other way, however, mass transportation will bear only faint resemblance to the systems of the present. As transit puts on her fancy clothes, she will become a real princess.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE FUTURE OF URBAN TRANSPORTATION: II

Transportation and poverty

JOHN F. KAIN
&
JOHN R. MEYER

WIDESPREAD concern about the problems of poverty and race has led to a proliferation of schemes for reducing the unemployment, increasing the incomes, and generally improving the well-being of disadvantaged groups in our society. Prominent among these are several that would use transportation to increase the employment opportunities of the poor. The concept that inadequate transportation must be numbered among the disadvantages of the poor and that improved mobility, particularly as it improves access to jobs, could increase their self-sufficiency was publicized widely in the aftermath of the Watts riots in 1965. The McCone Commission report on the causes of the riots concluded that "the most serious immediate problem [facing] the Negro in our community is employment. . . ." The commission suggested

---

This article summarizes a Conference on Transportation and Poverty, held June 7, 1968 which was organized and chaired by the authors. The conference was sponsored by the American Academy of Arts and Sciences, and financed by the Department of Housing and Urban Development and by the Bureau of Public Roads of the Department of Transportation. The papers prepared for the conference are listed at the end of this article, and references to the papers are given in the text by numbers in brackets.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

that, although a serious lack of skill and overt discrimination are major causes of high Negro unemployment, inadequate and costly public transportation also limit Negro employment opportunities:

> Our investigation has brought into clear focus the fact that the inadequate and costly public transportation currently existing throughout the Los Angeles area seriously restricts the residents of the disadvantaged areas such as south central Los Angeles. This lack of adequate transportation handicaps them in seeking and holding jobs, attending schools, shopping and fulfilling other needs.[1]

The McCone Commission, therefore, recommended that public transit services in Los Angeles be expanded and subsidized. (Its report was strangely silent about the possibility of improving access to jobs by reducing segregation in the housing market.) This recommendation attracted considerable public attention, and the federal government, through the Department of Housing and Urban Development, has sponsored some demonstration projects designed to ascertain if better and more extensive transit services between ghettos and employment centers would yield additional jobs for ghetto residents. The entire subject is very fashionable. But it is astonishing how little knowledge lies behind the popular political opinions it provokes.

A new problem?

In light of the new public awareness of the relation between poverty and transportation, it is appropriate to ask whether the problem itself is new. Obviously, poverty is no new problem; nor is it a growing problem. But when the relation between transportation and poverty is examined, it becomes apparent that something *is* new. Postwar changes in urban ecology and transportation systems, while conferring significant improvements on the majority, have almost certainly caused a *relative* deterioration in the access to job opportunities enjoyed by a significant fraction of the poor.

To be sure, many, if not most, poor continue to live in centrally located residential areas; and these are reasonably well served by public transit to the central business district, where one usually finds the highest density of job opportunities. But in the past two decades, new job opportunities have grown more swiftly *outside* this central business district. It is estimated that there may be 100,000 fewer low-income jobs in New York City than there are low-income workers [7]. A similar pattern has apparently emerged in several other American cities [4]. Living in a neighborhood well served by public transit to the central business district is therefore less of an advantage for lower-income groups today than it once was.

[1] California Governor's Commission on the Los Angeles Riots, *Violence in the City—An End or a Beginning?* (Los Angeles, 1965), p. 65.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The automobile and the poor

Reflecting these and other changes in the post-war pattern of American urban living, the total number of passenger trips by mass transit has declined in every year since World War II. Much of the early post-war decline must be viewed against the abnormal conditions of wartime, when transit use was artificially swollen by restrictions on automobile use; transit patronage in 1953 was almost the same as in 1940 or 1941. But the decline in transit use has continued well past 1953, and today transit patronage is about two-thirds of what it was in 1940 or 1953, in spite of a considerable growth in urban population during the past decade.

This can be explained by the fact that a growing proportion of the urban population chooses to travel by automobile. To a considerable extent this results from steadily expanding auto ownership. In 1950, 6 out of every 10 United States households owned one or more private automobiles. By 1967, the figure was nearly 8 out of every 10. But of family units with incomes between $2,000 and $2,999 before taxes, only 53 per cent owned an automobile in 1967. The percentage of those with autos in the below-$2,000 bracket is, of course, much lower still.

The low levels of auto ownership among the poor reflect the fact that the automobile, though a near necessity in much of urban America, is a very expensive one. The high initial capital outlay and operating costs of a private automobile are a heavy strain on the budgets of low-income households. In general, then, when adequate transit services are available, low-income households can and do obtain substantial savings by foregoing auto ownership.

The acquisition of an efficient private automobile (one without exorbitant maintenance costs) requires considerable financing, a chronic difficulty for the poor. Poor people, therefore, even when they own cars, generally own poor cars. Many of these are inadequate for long-distance commutation and expressway operation. Often they are also uninsured. Thus, statistics on car ownership among the poor, as adverse as they are, may paint a more favorable picture than is actually justified.

The dependence on public transit by the urban poor therefore continues to be very great. In the New York region, for example, less than 25 per cent of the households earning under $1,000 per year in 1963 used private automobiles to reach work; over 75 per cent used some form of transit. The proportions using automobiles were 57 per cent for those with incomes between $4,000 and $10,000, and 62 per cent for those with incomes over $10,000 per year [7].

Transit managements have made some effort to offset the steady decline in transit use by developing new markets. They have done this mainly by expanding route miles or services offered. The route miles of rapid and grade-separated rail transit service have increased

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

about 2 per cent since 1945 and soon will increase further as new rail rapid transit systems under construction are completed. Route miles of all kinds of transit service, bus and rail, have risen nearly 20 per cent since 1955. In the same period, however, transit operators have curtailed the vehicle (revenue) miles of services offered by 20 per cent in response to decreases in ridership. To some extent this decline in vehicle miles of service has been offset by the use of larger vehicles with more seats. Nevertheless, the overall effect has been a reduction in the frequency and, therefore, the basic quality of the service rendered. In general, reductions in service offerings have been most severe on weekends and other off-peak periods (particularly evenings) and for commuter trains.

Transit to suburban jobs

The effectiveness of the additional route miles, moreover, has been less than it might have been because modern bus transit tends to follow the same routes as the old streetcar lines. This means that a high percentage of services in most cities converge on the central business district. For an individual to make a trip from one point at the periphery of a city to another point at the periphery usually requires taking one radial line into the central business district and then transferring to another line to make the trip out to his destination. This arrangement tends to be costly for both operators and users. Bus lines operating through a central business district encounter congestion, with all that entails for increasing operating costs. For the user wanting to make a trip from one peripheral urban location to another, the radial trip to and from the CBD means a much longer and more time-consuming journey than is geographically necessary. Commuters at all income levels, therefore, tend to use automobiles for such trips. Even the poor tend to do so whenever they can make the necessary arrangements, either by owning an inexpensive car or by joining a carpool.

In general, conventional transit is at a performance disadvantage compared to driving or carpooling when serving thinly-traveled, long-distance routes between central city residences and suburban workplaces. Even when available, the transit service is often too little and too slow to compete with the automobile. Moreover, such transit service can impose dollars-and-cents handicaps that go beyond the direct costs in money and time of the commuter's trip itself. For example, conventional transit often adapts to limited demand by providing only peak-hour service between the suburban work places and centrally located residential areas. The worker must either catch the bus when it leaves exactly at closing time, or find some other mode of transportation, often at considerable additional expense. This means that the worker who depends on public

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

transit cannot easily accept overtime employment. The unavailability of a worker for overtime work not only denies him a lucrative opportunity, but can involve costs to his employer as well. Limited public transit scheduling, for example, can make it difficult for the employer to stagger shifts or closing hours. (And staggered closing hours can be helpful in solving such other transportation problems as traffic congestion at peak commuter hours.)

It is therefore not surprising that transit operators serving suburban plants report that low-income workers frequently use transit only when obtaining their jobs and for the first few days or weeks of employment. Once the workers manage to save enough for the down payment on a car, or become acquainted with some fellow workers living near them, they drive to work or join a carpool. *If this is a common pattern, existing transit services may indeed be serving a critical function for low-income households, but one whose value is badly gauged by the fare box or by aggregate statistics on transit use.*

The basic problem, however, remains: efficient transit requires that large numbers of persons travel between the same two points at approximately the same time. The growing dispersal of workplaces and residences means that this condition is satisfied less frequently than before. As jobs, and particularly blue-collar jobs, have shifted from areas that are relatively well served by public transit to areas that are poorly served, employment opportunities for low-income households dependent on public transit service have been reduced. Increasingly, low-income workers are forced to choose between a higher-paying job that is inaccessible by public transit, and thereby pay more for transportation (e.g., by buying and operating an automobile), or a lower-paying job that is served by transit. To put it in somewhat different terms, low-income households now have at their disposal at most only a bit more, and oftentimes less, transit service than they once did for reaching what is, in effect, a much larger metropolitan region.

The problem of race

The dispersal of the job market and the decline of transit systems have created particular difficulties for low-income Negroes. If the job of a low-income white worker shifts to the suburbs, he is usually able to follow it by moving to a new residence. If not, he may be able to relocate his residence to be near a transit line serving his new suburban workplace reasonably well. The low-income Negro worker, however, may not be so fortunate. Regardless of his income or family situation, if his job moves to the suburbs, he may find it difficult to move out of the ghetto. That is, his residence may not easily follow his job to the suburbs. For him, the service characteristics, coverage,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and cost of the transportation system can therefore be especially critical.

Unfortunately, conventional transit systems usually do not provide adequate services between the ghetto and suburban workplaces. The black worker, confined to ghetto housing near but not directly at the urban core, cannot readily reach many new suburban job locations by simple reverse commuting on existing transit systems. Existing public transit tends to connect suburban *residential* locations with the very core of the central business district; it may not pass through, or even near, new suburban industrial or office parks, just as it may also fail to pass through the ghetto.

If the ghetto resident is able to reach a suburban workplace at all by public transit, the trip may be expensive. If he is lucky, he may be able to join a carpool with a fellow worker and share the considerable expense of a long-distance auto trip from the ghetto. Here, too, the limitations on his residential options and the remoteness of most suburban workplaces from the ghetto reduce the possibilities of him making an advantageous arrangement.

The policy questions

Despite the public discussion and federally financed experiments that followed publication of the McCone Commission report, virtually nothing has been done so far to establish a factual basis for evaluating the utility of improved transportation in reducing urban poverty and unemployment. In particular, answers must be found to a number of questions. What effects do existing transportation policies have on income distribution? Are they the ones that were anticipated? Can transportation policy be an effective tool for expanding the opportunities and increasing the welfare of the disadvantaged? Should transportation be used this way? If so, what specific policies and programs should be adopted for achieving these purposes?

Jobs and transportation.

Inferior access to new jobs is by no means the only disadvantage of the ghetto resident. Indeed, in terms of his participation in the labor market, it may be much less important than other factors [1]. Thomas Floyd, who was deeply involved in the administration of demonstration projects in Watts and elsewhere, notes: "There is . . . reason to believe that some employers were using the transportation barrier as a convenient excuse for not hiring for other reasons. In addition to racial bias, there may be presumed or actual inadequate job skills or work habits" [3, p. 17]. When the improved transportation services were provided, he observed, the jobs did not always materialize.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

If transportation is but one of many factors influencing job opportunities, provision of more or cheaper transportation *by itself* is probably an inefficient method of reducing unemployment or increasing incomes. Effective measures to increase the opportunities, employment, and incomes of the long-term unemployed or underemployed must operate simultaneously on several fronts. Training, education, counseling, placement, and transportation programs complement one another. Most or all of these programs should have a role in any well designed assault on employment problems, and any one of these programs in isolation could well fail because it lacked other essential services. On the other hand, simply putting all these programs into effect simultaneously would not guarantee results either. The different programs must be properly articulated and synthesized.

Income redistribution and transportation.

Subsidies for urban transportation have long enjoyed wide support on the ground that such subsidies help the poor. In spite of the fact that the poor generally are more reliant on transit than the rich, the truth of this proposition is less than self-evident [11].

Advocates of public transit subsidies need to be discriminating if the subsidies they support are actually to aid the poor. Many proposed new systems, such as the BART system in San Francisco and the transit extensions in Boston, will provide only nominal benefits for the poor. In fact, it is probable that both systems will have a highly regressive impact. They are to be subsidized out of the property tax, which is heavily regressive; and virtually all of the benefits will accrue to high-income, long-distance commuters traveling between high-income suburbs and central employment centers. They will do practically nothing to improve accessibility between centrally located ghettos and suburban employment centers.

In general, users of high-speed, long-distance rail commuter systems are among the wealthier classes of society. Local bus systems, by contrast, frequently serve large numbers of low-income users. Paradoxically, these local bus services rarely require large public subsidies. In fact, the available evidence suggests that local bus systems serving low-income and dense central city neighborhoods often make a profit, and often subsidize unprofitable long-distance commuter systems serving low-density, high-income neighborhoods [11].

Another anomalous fact is that a disproportionate number of taxi trips are made by poor persons. The explanation apparently is that many locations are simply inaccessible to carless households except by taxi. For many of the poor, occasional use of taxicabs as a supplement to transit and to walking is relatively economical compared with automobile ownership.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

New York provides contrasting figures that illustrate this point. In New York, poor households do *not* make proportionately more taxi trips than middle-income families. The reason is that a smaller proportion of middle- and upper-income families own automobiles in New York than elsewhere. Moreover, the public transit system is much more extensive in New York than in most other cities and is thus a better substitute for taxicabs. In small cities and towns, however, taxicabs are sometimes the only form of public transit available to the poor. In these instances the poor and infirm may be almost the only users of taxicabs—because everyone else drives.

Thus, the apparently simple question of which income groups use which modes of transportation is a good deal more complex than is commonly imagined. Such hasty generalizations as "taxicabs are a luxury used only by the very rich"; "automobile ownership is limited to the well-to-do"; and "transit is used only by the poor" fail to hold up under scrutiny.

The mobility and transport choices of different income groups could be discussed more cogently if we had better measures of urban mobility [5]. Unfortunately, the usual measure of "tripmaking" used in metropolitan transportation studies is poorly suited for defining mobility differences between different income classes. By definition, only vehicle trips (transit, truck, taxi, or automobile) and walk-to-work trips are counted as trips; walking trips other than those made to and from work are omitted. On average, such non-commuter walking trips are probably of far greater importance in low-income than in high-income neighborhoods. Poor people more often than higher-income people live in high-density neighborhoods where shopping, recreation, and employment are located close to home. Many trips that must be made by auto or transit in low density areas can conveniently be made by foot in high-density neighborhoods. Whether this means, as some believe, that the poor should be considered less mobile is not entirely clear.

In general, almost no data exist that describe how persons of different life styles, living at different urban densities and income levels, solve their personal transportation problems. Moreover, there is no hard information to demonstrate the existence of large and unfulfilled latent demands for alternative forms of transportation. Information on such matters is crucial for designing programs to improve the mobility of the poor and for evaluating the benefits of such programs as against their costs. Yet, to date, the information simply has not been gathered.

Indirect costs.

Most observers agree that the indirect and secondary costs of major transportation investment, such as urban expressways and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

rapid transit, have not been given adequate consideration when choosing locations and alignment, designing facilities, and deciding whether construction is justified at all. At least two major kinds of such costs can be identified.

First, there are uncompensated costs imposed on individuals—residents, property owners, and businessmen—who are forced to move. These uncompensated costs commonly include not only the direct money outlays for moving but also losses engendered by destruction of cherished friendships, familiar environments, business relationships, and other intangibles.

Second, there are collective costs. These consist of adverse changes in the neighborhood or environment and largely affect those who are *not* required to move. It is sometimes remarked that the owners whose property is taken by eminent domain are often the lucky ones. Those located nearby, but not within, the right-of-way frequently suffer disruption and loss of value for which they receive no compensation. There can be no doubt that the building of a major highway or transit line through a residential area causes fundamental changes to the neighborhood. These changes may be either beneficial or harmful—quite often, they are both.

There is some evidence that the disruption may be greater if the highway or transit line is put through a tightly knit working-class community as opposed to a middle-class area. Some observers have argued that the working-class family is more immobile than the middle-class family, and more tightly linked to an extended family that typically lives within walking distance [2]. If true, when a decision is made to carry out construction in a working-class neighborhood, greater aid may be needed to compensate displaced residents and to assist the reconstruction of their environment.

Unfortunately, few operational tools are available for improving route selection decisions by taking such broader social considerations into account. To do so, several hard questions must be faced. How much community-wide benefit from construction of a road should be sacrificed for these neighborhood and individual values? Can cash payments of whatever amount compensate residents for the real character of their loss? If they cannot reconstruct their present environment, would adequate resources allow the displaced to construct a different but equally satisfactory or better environment? Is the problem in question essentially unique, or is it typical of all or most low-income communities? If it is typical, the road builders' options are, of course, limited. Almost any alignment would impose comparable costs on the affected communities. The range of choice is then narrowed to whether the road should be built, which remedial actions should be taken to limit the displacement or damage, and how generously the damaged population should be compensated.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Existing compensation formulas and mechanisms, unfortunately, fail to compensate many losers altogether and provide many others with grossly inadequate compensation. These inadequacies are responsible for much of the current resistance to urban transportation construction. A few individuals are often required to bear a disproportionately large share of the costs of urban transportation improvements in order to provide benefits for all. In these circumstances, spontaneous community action to oppose the new construction is hardly surprising.

Proposed solutions.

Perhaps the most ambitious proposal for improving urban transportation services for the poor is to make public transit free, thereby eliminating income as a determinant of transit use. Clearly, though, this is inefficient [8]. A large proportion of transit users are not poor, and free transit would subsidize the affluent as well as the poor. Moreover, the major difficulty facing the poor, and particularly the ghetto poor, is not that transit is too expensive, but that it is all too frequently unavailable in forms and services that are needed. In general, transit use seems far more sensitive to service improvements than to fare reductions, even for the poor. Nor is "free" transit particularly cheap. It has been estimated that, nationwide, the costs of free transit would be approximately $2 billion a year, assuming no increase in service [8].

Boston can be used to illustrate the comparative costs of free transit and service improvements for the poor. Until very recently, access between Boston's Roxbury ghetto and rapidly expanding suburban employment centers has been nonexistent for all practical purposes. The costs of providing transit services between all Boston's poverty areas (i.e., census tracts with median family incomes below $5,500 per year) and low-skill employment centers has been estimated at about $4.3 million annually. This is to be compared with an estimate of $75 million a year for free transit in Boston. The $4.3 million figure is, moreover, a total or gross cost; it would be less if any fare box revenues were realized. Furthermore, the $75 million subsidy for free transit would not provide any significant improvement in transit service between central city poverty areas and suburban employment centers [8].

An increasingly popular view is that public transit systems, as currently constituted, are incapable of increasing the mobility of the poor [4, 5, 9]. The argument is that the transportation demands involved in serving outlying workplaces from central city residences are too complex to be met adequately by any kind of public transit services at costs that are competitive with private automobiles. At two persons per car, for example, the cost of private automobile

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

operation often is comparable to or lower than bus transportation in serving dispersed workplaces [9].

If so, it may be cheaper and more effective to provide some form of personal transportation for the poor. One such proposal, which its originator terms "new Volks for poor folks," is to rent, lease, or otherwise finance new or relatively new cars for low-income households [9]. Cheap used cars are seldom low-cost cars. If the cost of automobile use is to be reduced for low-income groups, their cars must be relatively new; if they are to have such new cars, the cost of credit must be lowered. A related proposal is to assist those workers who live in central ghettos and work in the suburbs to sell transportation services to fellow workers [9]. Such sales would help pay the purchase and operating costs of an automobile. In many cities, however, this proposal would encounter a number of institutional and legal barriers.

Of course, new cars for poor people will not help nondrivers, who are now estimated to make up 20 per cent of the population over 17 years of age. In fact, any extension of automobile ownership among the able-bodied poor may only serve to further degrade public transit services for nondrivers. To provide mobility for nondrivers, some have advocated the development of so-called demand actuated systems [3, 9]. Different versions of this concept come under a variety of names or acronyms, including Taxi-bus, Dial-a-bus, DART, GENIE, and CARS. In all cases, however, the idea is to provide something approximating the point-to-point service of taxis, while achieving better utilization levels and load factors than transit vehicles can now achieve on fixed routes and schedules.

In these systems, vehicles intermediate in size between a taxicab and a conventional bus would be used to pick up and deliver passengers at specific origins and destinations. By use of electronic control and scheduling, it is claimed, loads could be assembled with a minimum of delay. Proponents believe these systems usually would have cost characteristics intermediate between the conventional bus and the taxicab. By providing more individualistic door-to-door service than public transit, these systems might be of particular use for the elderly and the infirm. Furthermore, if such systems have the advantages suggested, they might be a better and more politically acceptable solution to the problems of ghetto access than subsidies to extend ownership of private automobiles, particularly in older cities with high density central residential neighborhoods.

Indeed, were it not for franchise restrictions and prohibitions on group fares, taxicabs could improve their operating efficiency considerably without any technological improvements. Demand-activated systems are functionally identical with taxis, but have more sophisticated scheduling, control devices, and operating policies.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Indeed, many benefits would accrue to the poor if there were fewer restrictions on the provision of taxi and jitney services [10]. A deregulated taxi industry would provide a considerable number of additional jobs for low-income workers. It has been calculated that removing entry barriers and other controls might expand the number of taxis by as much as two and a half times in most American cities. In Philadelphia, for example, deregulation could create an additional 7,400 jobs for drivers alone; if these jobs went to the poorest 20 per cent of the population, unemployment among these poor would fall by about 3.2 percentage points [10].

Taxi operation can also be an important income supplement for low-income households even where it is not a full-time job. A significant number of Washington's taxi drivers own and operate their own cabs on a part-time basis as a supplement to a regular job. The off-duty cab often doubles as the family car, thus substantially reducing the cost of auto ownership and increasing the mobility of residents of low-income neighborhoods [10].

A much expanded taxi and jitney industry could also provide an appreciable increase in urban mobility, particularly for the poor. Except for restrictive legislation, jitneys and taxicabs might now be providing a significant fraction of passenger service in urban areas. The greater number of taxis per hundred persons in Washington, D.C., an essentially unregulated city, and the sizable capital value of medallions (franchises to operate a cab) in New York, Boston, and several other cities, attest to a substantial latent demand for these services.

In short, simply providing larger subsidies to transit systems is unlikely to be an effective way of increasing the mobility of the poor. New systems seem needed, and there is some agreement on their characteristics. Such systems would normally use a smaller vehicle than conventional transit, would be demand activated rather than on fixed routes and schedules, and would provide point-to-point service or some close approximation of it. Such systems would most likely have somewhat lower passenger mile costs than do taxicabs (even those operating in unrestricted markets like Washington), but unit costs probably would be somewhat above those of current transit systems. In some instances, such services might merely supplement the more heavily used transit services; in others, they might replace such services altogether.

Ownership of these more ubiquitous systems might vary from place to place and from time to time. Where elaborate control and scheduling are required, a fleet might be necessary. In other instances, the services could be provided by large numbers of owner-operators working either independently or in a cooperative. Another possibility is nothing more complicated than organized carpooling, compensated or uncompensated.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Most such systems require very little long-lived investment. The most extensive capital requirements, of course, would be for the more elaborate, electronically controlled, demand activated systems. All would require major changes in institutions and regulatory frameworks. Fortunately, however, most also lend themselves to experimentation on a modest scale. Such experimentation could do much to improve our fund of information, which at this point is simply inadequate to support bolder policy initiatives.

Papers presented at the Conference on Transportation and Poverty, American Academy of Arts and Sciences, June 7, 1968. The papers and a transcript of the conference may be obtained from the American Academy of Arts and Sciences, 280 Newton Street, Brookline, Massachusetts 02146, or from the Clearing House for Federal Scientific and Technical Information, 5285 Port Royal Road, Springfield, Virginia 22151. The report is in two parts: 1. "Summary and Conclusion and Papers Presented" (Clearing House No. Pb-180956) and 2. "Edited Transcript" (Pb-180955).

[1] Peter B. Doeringer, "Ghetto Labor Markets—Problems and Programs."
[2] Gordon Fellman and Roger Rosenblatt, "The Social Costs of an Urban Highway: Cambridge and the Inner Belt Road."
[3] Thomas H. Floyd, "Using Transportation to Alleviate Property: A Progress Report on Experiments under the Mass Transportation Act."
[4] William F. Hamilton, "Transportation Innovations and Job Accessibility."
[5] Phillip B. Herr and Aaron Fleisher, "The Mobility of the Poor."
[6] Edward Kalachek, "Ghetto Dwellers, Transportation, and Employment."
[7] Harold Kassoff and Harold Deutschman, "People, Jobs, and Transportation: A Profile of Low Income Households in the Tri-State Region."
[8] Gerald Kraft and Thomas A. Domencich, "Free Transit."
[9] Sumner Myers, "Personal Transportation for the Poor."
[10] Sandra Rosenbloom, "Taxis, Jitneys, and Poverty."
[11] Martin Wohl, "Users of Urban Transportation Services and Their Income Circumstances."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A POLICY FOR URBAN GROWTH: I

Where shall they live?

JAMES L. SUNDQUIST

By the end of this century, 100 million people will be added to the population of the United States. That is as many people as now live in Great Britain and France combined.

Where shall they live?

If present trends continue—if they are allowed, that is, to continue—most of the 300 million Americans of the year 2000 will be concentrated on a very small proportion of the nation's land area. Projections of the Urban Land Institute place 60 per cent of the country's population—or 187 million persons—in just four huge urban agglomerations. One continuous strip of cities, containing 68 million people, will extend 500 miles down the Atlantic seaboard from north of Boston to south of Washington, D.C. Another, with 61 million, will run from Utica, New York along the base of the Great Lakes as far as Green Bay, Wisconsin. Some 44 million persons will live on a Pacific strip between the San Francisco bay area and the Mexican border. A fourth agglomeration, with 14 million, will extend along the Florida east coast from Jacksonville to Miami and across the peninsula to Tampa and St. Petersburg.

Most of the remaining 40 per cent of Americans will live in urban concentrations, too—and big ones. In this decade, the larger concentrations have been growing fastest; metropolitan areas over 150,000 grew faster than the national average of 9.8 per cent be-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tween 1960 and 1965, while the smaller areas grew more slowly, as the following data show:

SIZE OF URBAN AREA	1960-65 GROWTH RATE (PER CENT)
20,000 — 50,000	7.6
50,000 — 100,000	8.3
100,000 — 150,000	8.4
150,000 — 250,000	10.6
250,000 — 500,000	9.8
500,000 — 1,000,000	11.8
over 1,000,000	9.8
all metropolitan areas	10.1
nonmetropolitan areas	3.9

Adapted by the Advisory Commission on Intergovernmental Relations from Rand McNally.

These trends, continued for the next three decades, would place 77 per cent of the coming 300 million Americans on 11 per cent of the land (excluding Alaska and Hawaii). Only 12 per cent of the population would be outside urban areas of 100,000 or more population.

Is this the way we want to live?

Two questions are presented. The first pertains to regional balance. Is it desirable that population be massed in a few enormous "megalopolises" along the seacoasts and lakeshores? The second relates to rural-urban balance (or, more accurately, the balance between metropolitan and nonmetropolitan areas). Is it in the best interest of the country, and its people, to continue indefinitely the depopulation of rural and small-town America and the building of ever bigger metropolitan complexes, in whatever region? In short, the 300 million can be highly concentrated in a few "megalopolises," or they can be distributed more evenly as among regions and dispersed in a more nearly balanced way among large metropolitan areas, middle-sized cities, and thriving small towns and villages. Which do we want?

But there is an earlier, and even more fundamental, question. Is population distribution a matter upon which the United States should have a policy at all?

Population policy or laissez-faire?

The projections of the enormous population concentrations that are in prospect have appeared in the popular press, but they are presented as Sunday supplement curiosities—as glimpses into the inevitable and ordained future—not as a subject for public debate and acceptance or rejection. Yet surely the subject is one worthy of debate. How each family lives is profoundly influenced, even controlled, by the size of the population cluster in which it is em-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

bedded. The degree to which population is massed determines the amenity and congeniality of the whole environment in which adults and children live and grow and work. It affects their personal efficiency, their sense of community, their feelings about the relationship between man and nature, their individual and collective outlooks on the world. The impact of size is most emphatic on the lives of the ghetto dwellers of the great cities, of course, but no one in a megalopolis is immune. The resident of Scarsdale or Winnetka is not wholly spared the stresses of big city life; the larger the metropolitan area, the greater the strains and irritations of commuting and the more inevitable that the environmental pollution that arises from population concentration will affect the most idyllic suburbs, too. In any case, the desirability of population concentration must be measured by its consequences for the majority of families who live at near-average or below-average levels, not upon the few who can insulate themselves in political and social enclaves.

So the question is, what kind of environment do we want to build? The nation, through its government, has established policies on matters of far less crucial import, yet the extent to which the country's population will be concentrated remains essentially laissez-faire. That would be all right, perhaps, if by laissez-faire one meant free choice by the individuals and the families that make up the population. But it is far from that. The movement of people from smaller to larger places is, to a large extent though no one knows the exact proportions, involuntary, forced migration. Young people going freely to the cities in search of adventure and opportunity make up part of the migrant flow, but only part; among the rest are millions of uprooted, displaced families who have little desire, and less preparation, for life in large cities and whose destination is often inevitably the city slums. These displaced families are simply forced into the migration stream by economic forces they cannot control.

The spatial distribution of population is determined, of course, by the distribution of jobs. With the exception of the limited numbers of the self-employed and the retired, people are not in reality free to live just anywhere. The vast majority are employees who must live where there are jobs, and the location of jobs is not their choice. The concentration of the country's population is the result of employer-created job patterns that the people have had to follow.

For the most part employers have not been free to create jobs just anywhere, either. They have been bound by considerations of economic efficiency—the location of raw materials and of markets, the transportation cost differentials of alternative locations, etc. As a result, the basic pattern of population distribution has been designed by the play of economic forces, not by men acting rationally as environmental architects; events have been in the saddle once again.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

It need not be. In the past, population distribution has been a subject of conscious national policy and it can be again. In the first hundred years of the nation, the government pursued a deliberate policy of dispersing population westward. Motivated in part by desire to confirm its title to the empty continent, the government subsidized turnpikes, railroads, and river navigation, herded Indians onto reservations, and opened public lands to settlement.

Once the continent was spanned, governmental programs continued to encourage a balanced regional development—reclamation, navigation, and electric power projects traditionally, and more recently the more sophisticated and broader efforts authorized in the Appalachian Regional Development Act and the "depressed areas" legislation of the 1960's. The government enacted rural development programs specifically aimed at rural-urban balance, administered for the most part by the Department of Agriculture.

But there is apparently no clear sense of national purpose like that which motivated the early policies for western development. The present regional and rural development programs essentially are the product of legislative log-rolling—the chance balancing of political forces analogous to economic laissez-faire. Urban programs need rural votes so urban areas support rural programs. The west, or the south, or the Appalachian states can muster enough political strength to enact limited programs. But they are offset—more than offset, probably—by other programs that encourage population concentration, like the postwar housing programs that fostered suburban growth around big cities but were inoperative in most smaller cities and rural areas. Congress responds to the pressures of its various constituent regions more or less in proportion to their relative political strength, which means that future congresses will be less and less likely to tilt the benefits of its programs toward nonmetropolitan areas, that are declining in relative political importance, unless it is guided by a conscious policy of population distribution.

Perhaps it is enough to repeat the well-worn observation that a lack of policy is itself a policy. If the nation chooses not to have a population distribution policy, then it is, in effect, accepting the agglomeration that is in prospect, in preference to any alternative spatial distribution patterns that might be brought about by decisive intervention to influence and control the forces that shape the future.

Is it possible to develop a better population distribution pattern than the one in prospect, if the country's scholars, philosophers, and politicians were to put their minds to it?

Making a population distribution policy

It is far easier to agree in the abstract on the logic of having a population policy than to agree upon the policy itself, which may

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

be the most practical and telling argument for laissez-faire. But let us see what might be involved in such an exercise.

Two criteria are apparent. A population distribution pattern could be designed either according to what is considered good for people or according to what they want. (As we know from documents as early as the book of Genesis and as late as the Surgeon General's Report, those are not necessarily the same.) Unfortunately, in either case we must do our thinking without benefit of solid data because no one knows for sure either what is best for people or what they want. Nevertheless, there are many clues.

Even in the absence of quantified evidence, it seems reasonably clear that our largest urban concentrations have grown well beyond the point at which diseconomies of scale begin to show. The costs of moving people and things within large metropolitan areas are demonstrably greater than the costs of moving them in smaller population centers. Commuting distances are obviously longer, the time loss greater, the costs higher. The flight of industry from central cities to the suburbs is a reflection, in part, of the cost of transportation to and within congested areas. The cost of urban freeway construction varies directly with the population density of the areas affected, and subway systems are an enormous expense that only the larger metropolitan areas require. Such municipal functions as water supply and sewage and solid waste disposal are probably also subject to diseconomies of scale, for the simple reason that the water and the waste must be carried over longer distances. San Francisco, for example, had contemplated dispatching a 70 car train daily to carry its solid waste over 300 miles into the mountains on the Nevada-California border.

The diseconomies are ultimately measurable, at least in theory, in dollars and cents. Other disadvantages of scale are less measurable but no less real. Air pollution, for example, is a function of the dense concentration of automobiles. Similarly, water pollution is more amenable to control in areas where population is dispersed; there, given the will, the way is at least available.

One other factor that must be considered in any calculation of costs and benefits of urbanization is the social and economic cost of migration itself. To decide which new plant location is *really* most efficient, it is not enough to measure only the building and operating costs of the plant, although that has been the sole criterion of our laissez-faire philosophy. There are enormous costs, as well as appalling cruelties, in the forced displacement and migration of populations, whether it be Negroes from the south, mountaineers from Appalachia, or small businessmen from the declining regions of the Great Plains and the midwest. (In the 1950's, more than half of America's counties suffered a *net loss* of population.) Families lose their homes and savings and equities and property values along

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

with their most deeply cherished associations; communities lose their tax base for public services; community institutions wither. Some of the migrants are too ill-prepared, too sick, or too poor to adjust to city life successfully; many of them wind up on welfare, and they burden every kind of institution. Yet these costs and losses are not borne by the industry locating the plant, but by people and communities, thereby entering no one's cost-benefit equation, no one's computations of efficiency. If they did so enter, then calculations of simple efficiency would no doubt show that, as a general rule, it is far from economical from the standpoint of the *whole* society to create new economic opportunities where the people are rather than allow existing communities to die while building other whole communities from the ground up in the name of "economic efficiency."

Moving from the physical to the social environment, hard data on disadvantages of scale are even more difficult to come by. Yet we know that as population in general is concentrated, so is poverty (large ghettoes exist only in large urban concentrations) and crime, drug addiction, family breakdown and every other form of social pathology. It may be specious to argue that rural poverty is better than urban poverty when both are bad enough, yet the fact remains that the social evils associated with poverty tend to be mutually reinforcing when the poor are herded together in concentrated masses —as studies of public housing populations, for example, have clearly shown. Racial tension and rioting are not limited to big cities, to be sure, but in their most terrifying aspects they seem to be. Perhaps most important of all, the problem of unemployment and underemployment of the urban poor appears all but insoluble in the largest urban complexes, because transportation systems just cannot economically link the inner cities where the poor live with the scattered suburban sites where the new jobs are being created. In smaller places, by contrast, people can even walk to work.

For all these reasons, it is not hard to accept as a hypothesis, at least, that our largest metropolitan agglomerations are less governable, less livable and economically less sound than smaller urban centers. If this is the case, then it should not matter whether the people like their agglomerations; in the public interest, they should be dispersed. However, what little evidence is available suggests that people do *not* like to live in unlivable places; they are there, in substantial proportion, against their will. A Gallup poll in 1968 showed that 56 per cent of Americans would choose a rural life, if they were free to choose, only 18 per cent a city and 25 per cent a suburb. Even a majority of the inhabitants of Paris—surely one of the most livable of large cities—were shown in a polling sample to prefer small town life. The polling methods may be suspect—the Parisians may have been comparing the city life they know to an

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

idealized life in a romanticized rather than a real small town—but the results are indicative if not conclusive.

More important, from the standpoint of judging what people want, is the plain fact cited earlier that a high proportion of population migration is involuntary movement. Except for economic pressures, many, perhaps most, people would not move to the city in the first place. And they go home eagerly when the economic pressures shift. Each slump in the auto industry finds the Appalachians in Detroit heading back to the hills, and the first generation Puerto Ricans in New York City characteristically look upon themselves as transients who will return home as soon as they are financially able to do so.

It should be possible, within a reasonable time, to fashion a quantitative methodology that would supply at least some hard data on these questions—both on the economic costs and benefits of population concentration and on the reaction of human beings to the life styles they find themselves compelled to assume in centers of population density. Let us suppose that these data agree in confirming what intuition seems to tell us: that our largest metropolitan agglomerations have grown too far beyond the human scale, that their further growth should be arrested, and that their population should, if possible, be lessened. What then? Other countries have become concerned about population concentration—Great Britain, for instance, has been worried for two decades about the drift of people to the densely-settled south—without finding the means to check or reverse the concentration process. Is there any reason to think that the United States can do better?

Getting the problem on the national agenda

The first problem is one of gaining attention and getting interest. Henry David has remarked that, to keep its sanity, a society must practice "selective inattention"—it simply cannot attack all of its problems all at once. Population distribution is one of the problems that, until very recently at least, had been marked for inattention.

Over the last decade, only one leading figure in public life has made it his mission to sound the alarm on the question of population distribution policy. That was the recent Secretary of Agriculture, Orville L. Freeman. For the whole of his eight years in office, he led a personal crusade for what he initially called "rural areas development" and later came to call "rural-urban balance." Before a House Subcommittee in 1967, he said, "I say it is folly to stack up three-quarters of our people in the suffocating steel and concrete storage bins of the city, while a figurative handful of our fellow citizens rattle around in a great barn full of untapped resources and empty dreams." And then he got carried away: "The whiplash

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of economic necessity which today relentlessly drives desperate people into our huge cities must be lifted from the bleeding back of rural America."

Freeman's metaphors could be excused; no one listened to all his years of sober pleas and reasoned argument. True, President Johnson gave him moral support and himself made a speech or two on rural development and sent the Congress some minor measures, but the subject remained low on the president's priority list and even lower on the lists maintained by the Bureau of the Budget and other staff agencies that advise the president. As for the congressional committees on agriculture, who might have been expected to take some leadership, Freeman could not even get them to set up active subcommittees to consider rural development. Their concern for rural America extended to the price of agricultural commodities and the location of Department of Agriculture research stations, but not much further.

The nation's intellectual community, insofar as it was aware of the Freeman thesis, treated it with a disdain that blended into outright hostility. Teachers, writers, scholars, and editors for the most part live in cities; it is there that newspapers are published and television shows produced. The country's intelligentsia is wholly urban now; the voices that once sang of rural life, the Hamlin Garlands and Willa Cathers and Robert Frosts, are now stilled without replacement. One can stock a library with books on "the urban crisis," but try to fill a single shelf with works that deal in depth with the corresponding rural crisis!

A composite view of the urban intelligentsia toward rural America can be portrayed, with a touch of caricature, something like this: culturally, the cities have a monopoly, and have had since the Age of Pericles. Urban means urbane; rural means rustic. The theater, the concert hall, the museum are exclusively urban institutions; the countryside cannot produce the higher culture, and those who insist on living there are, by definition, both culturally unrefined and, what is worse, content to remain so. Economically, rural America is destined for decay; the economic forces that built the cities are too powerful to be reversed, even if it were desirable to do so. Freeman's "back to the farm" movement (which, for the record, is not what it was) is romantic nonsense that flies in the face of every economic reality. Sociologically, rural America is a backwater populated by misshapen characters out of Faulkner, given to choosing as their leaders men like George Wallace and Lester Maddox, and to hunting down civil rights workers and interring them on the banks of the Tallahoga river. Politically, it is time that rural America got its come-uppance; the farmers have been exploiting the cities far too long through outrageous programs that pay them enormous subsidies to cut production while the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

urban poor—and the rural poor as well—go hungry. Let the land grant colleges—the "cow colleges," that is—worry about the Podunks and the hicks and hayseeds who live there; we are an urban nation now.

This picture of the rural areas is not, unfortunately, wholly unrelated to reality. The fact is that the rural areas of the country *are* disadvantaged in many ways: they *are* culturally isolated (although their isolation has been drastically reduced by television and good roads); they *have* declined economically; their governmental and social institutions *are* often primitive and backward; racial exploitation *is* rife. But the cities are not all that superior. There is truth, too, in Freeman's counter-portrait of big cities as places of "congestion and confusion, crime and chaos, polluted air and dirty water, overcrowded schools and jobless ghettos, racial unrest . . . and riots in the streets."

But there are signs, now, that the intellectual world may at last be rediscovering rural and small town America and looking with fresh eyes upon the problem of rural-urban balance. Like so many other trends of current history, this one was set in motion in August 1965—in Watts. The analysts of that explosion, and those which followed, suddenly discovered that the problems they called urban had rural roots. "We're being overwhelmed," cried the urbanists. "Stop the migration. Get these people off our backs!" Joseph P. Lyford was among the first to see the rural-urban relationship. "Why," he asked in his study of a New York slum, *The Airtight Cage,* "do we treat the consequences and ignore the causes of massive and purposeless migration to the city? Why are we not developing new uses for those rural areas that are rapidly becoming depopulated? Why do we still instinctively deal with urban and rural America as if they were separate, conflicting interests when in fact neither interest can be served independently of the other?"

So the rural and the urban interest may have converged, finally, and it is out of such convergence that effective political coalitions are born and problems attain their place on the national agenda. The prospects for such a coalition are expressed most sharply in, of all places, the 1968 Republican platform. "Success with urban problems requires acceleration of rural development in order to stem the flow of people from the countryside to the city," reads the GOP's plank. The language is not without irony for the party of small town America and the party that enacted the Homestead Act. Should development of rural America be accelerated because rural people are suffering economically and, as God-fearing Americans, deserve a better fate? No. Should it be accelerated because rural development is a worthy goal on its own merits? Not at all. The whole subject is treated under the heading, "Crisis in the Cities;" rural development should be accelerated because

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the problems of the big cities, where the Democrats live, must be solved.

The leadership for a rural development coalition, also ironically, will have to come from those very cities. Groups with names like the Urban Coalition, the Urban Institute, and the Urban League will have to assume the burden of worrying about rural America, because there is no rural coalition, no rural institute, no rural league. Nobody has ever organized to speak for rural and small town people in the nation's councils as the United States Conference of Mayors, say, and the Urban Coalition speak for city people. Farm groups exist, to be sure, but their interest is the economic interest of farmers as producers, and most rural Americans—whatever the definition of the word "rural"—are not farmers but small town and small city dwellers. And they are not organized at all.

When rural America is saved, it is clear, it will be for the wrong reasons and under the wrong leadership. But that is better than not being saved at all.

The outlines of a program

The first requirement of any program to cope with America's population distribution ills—and the greater ills that are in prospect—must be a research component. As I observed earlier, those who would cope with the question have hardly any data at all on the consequences of population concentration, on the diseconomies and disadvantages of scale. (What data exist are summarized in the excellent 1968 report of the Advisory Commission on Intergovernmental Relations, *Urban and Rural America: Policies for Future Growth,* from which the figures used earlier in this article were taken.) Criteria do not exist for deciding how many people in a metropolitan area are too many or, at the other extreme, how much dispersal is too much dispersal.

Nevertheless, the country cannot afford to wait until all the analyses have been completed and all the facts are in. Action normally must precede research; it takes the actuality or imminence of action to attract scholars, and the funds required for their support, to an issue. The objective must be to move toward an ideal population distribution pattern while at the same time perfecting its design. And that is possible; in driving to the Pacific, one need not have a map of the entire route to know that he begins by heading westward.

We can begin by defining one objective—to bring to a halt, as nearly as possible, all involuntary migration. The purpose of governmental policy, then, would be to permit people to live and work where they want to live and work; if they prefer to move to the big city, well and good, but if they want to remain where

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

they are the objective should be to bring the jobs to them. That would serve the dual end of protecting the big cities against the unwanted influx of the displaced poor, and of taking from the shoulders of the poor themselves—and the involuntary migrants who may not be poor—the burden of paying through their own hardship and economic loss for the adjustments in employment patterns brought about by technological advance.

This proposal will be confronted at once by the objection that some rural areas are too remote, too backward to be salvageable in any circumstances—that no matter how much they are subsidized they are beyond the reach of economic opportunity. I hide behind the qualifying phrase; forced migration should be brought "as nearly as possible" to a halt, and where a rural community lies beyond the possibility of redevelopment (the Appalachian "head of the hollow" communities come to mind) then it is by definition impossible to help. However, the number of people living in such communities is far smaller than is usually believed, if one understands that the jobs to be provided need only be *near,* not *at,* the community concerned. Commutation is a fact of life in this automobile age in rural areas as well as on Long Island, and rural people commonly travel daily to jobs within a radius of 25 to 50 miles. Circles with 25 mile radii drawn around small cities that have a proven economic potential—proven by the fact that they are growing now—cover the vast majority of the country's rural population east of the high plains, and if the circles are extended to 50 mile radii they blanket almost the whole country but for a few sparsely-settled sections of the Western mountains and the plains.

In the administration of the Appalachian Regional Development Act and the Public Works and Economic Development Act, growth centers are designated, and investment is concentrated in those places to stimulate the growth not just of the centers themselves but of the hinterlands they serve. Usually every rural settlement in an area being assisted is within reasonable commutation distance of a growth center. The commutation radius can be greatly increased, of course, by the improvement of road transportation, which is part of the rationale behind the heavy emphasis in the Appalachian program upon the construction of "developmental highways."

A population distribution policy, then, would seek to encourage an accelerated rate of growth in the smaller natural economic centers of the country's less densely populated regions, as the alternative to further concentration of population in the larger metropolitan areas. To effectuate such a policy, the present approaches would have to be extended in both breadth and depth. First, they would need to be expanded beyond Appalachia and the other

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

presently-recognized redevelopment areas to cover all areas that are sources of out-migration. Second, they would need to be greatly improved in potency, so that they have a decisive impact upon the migration stream. Present federal programs are limited to public investment—roads, hospitals, vocational training schools, and so on—to strengthen the "infrastructure" of the nonmetropolitan areas, and loans and loan guarantees to encourage private investment. To these would have to be added the policy instrument of tax incentives that has proved so effective in stimulating and channeling investment both for war production and for peacetime economic growth. If an extra investment tax credit were available for defined types of new industry located in the places where the national population distribution policy called for it to be located, then jobs would be created where the people are rather than in places to which they have to migrate. Specific legislation to aid the development of new cities would also be helpful, although for the most part existing smaller cities should be the nuclei for urban growth. *Urban and Rural America: Policies for Future Growth* carefully catalogs a wide range of other possible program measures.

The rub will come, of course, when the Congress begins to write the language defining exactly the places eligible for benefits. While the objective of aiding sources of out-migration is simple enough in conception, the problem of drawing boundary lines is not. Specifically, growth centers that serve areas of out-migration would have to be included among the beneficiaries, even though the centers themselves were areas of in-migration. But only up to a certain point. A cutoff population figure would have to be established, at the point where a growth center is considered to have grown large enough, or at least to be able to attain its further growth under its own power. But given the old-fashioned booster psychology that still conditions the thinking of the leadership of even the largest cities, the Congress will find it difficult to designate any area, even the New York City area, as one that is destined—if national policy can bring it about—to stop growing. Real estate values still benefit from population increase, and wholesale and retail trade increase, no matter what the ancillary evils of population concentration. To most community influentials, bigger and bigger still mean greater and greater and richer and richer. A population distribution policy may therefore ultimately have to await a major shift in the national psychology.

When the country has to be jarred loose from a traditional outlook and shocked into a new one, the best means is often the institutional device that the United States has adopted from Great Britain—the royal commission. Such commissions have sometimes jarred us in the past; the Kerner commission, despite adverse circumstances, did so. Population distribution policy seems singularly

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

appropriate as a subject for study by such a body. To its credit, the Senate passed a resolution in 1967 and again in 1969 to create a Commission on Balanced Economic Growth. It remains for the House of Representatives and the president to act.

CONTRIBUTORS TO THIS ISSUE

CHARLES M. HAAR is Professor of Law at Harvard. He was formerly Assistant Secretary of Housing and Urban Development (HUD).... JOHN F. KAIN is Professor of Economics at Harvard.... Formerly Assistant Director of the Budget, PETER A. LEWIS now practices law with Lazard Freres and Company.... THOMAS E. LISCO is Chief Economist for the Chicago Area Transportation Study.... JOHN R. MEYER is President of the National Bureau of Economic Research and Professor of Economics at Yale.... DONALD A. SCHON is the President of the Organization for Social and Technical Innovation (OSTI).... CHARLES L. SCHULTZE, formerly Director of the Budget, is now Senior Fellow at Brookings Institution.... JAMES L. SUNDQUIST, formerly Deputy Undersecretary Department of Agriculture and a member of President Johnson's Poverty Task Force, is now Senior Fellow at Brookings Institution.... ROBERT C. WOOD, former Secretary of Housing and Urban Development (HUD), is Director of the Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A POLICY FOR URBAN GROWTH: II

Where shall the money come from?

CHARLES M. HAAR & PETER A. LEWIS

However we define the demands of urban growth—whether in terms of houses that shelter, schools that educate, safe streets, balanced transportation—one conclusion is clear: there must be a change in the mode of public financing if there is to be any hope for coping with, let alone overcoming, these problems.

Change is needed; but change will not come easily. To those close to the urban financial scene, it is not surprising that the first of the recent tax reform proposals to be dropped were those which attacked the tax-exempt status of interest on state and local government bonds. Any attempt to tamper with the existing methods of raising money for states and cities—at a time when their financial plight is notorious—is bound to meet heavy resistance. All 50 governors and hundreds of mayors united, for once with a single voice, against *H.R. 13270.* And with good reason, as it is given to them to see the reason: the municipal bond market raises $12 billion annually in new money for cities and states, financing half of their capital expenditures. Mayors and governors cannot risk losing a penny of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

this, for they are constantly rediscovering Burke's dictum that "to tax and to please, no more than to love and to be wise, is not given to men."

Yet the plain fact is that, as large as it is, the present system is inadequate for today. Its fault is not that tax exemption now offends public opinion but that it fails to raise enough money—and, in the nature of things, it cannot. We must devise new institutions to widen the source of funds for our urban demands.

And we don't have much time in which to act. The continuing growth of this nation, at the present rate, means that we must house, educate, sewer and water, recreate and transport 100 million more people within the next 30 years. If it is hard for the ordinary individual to grasp these facts, it is also hard, apparently, for the financial experts. While they have been worrying about rising interest rates for corporate needs, and about the need for a new federal budget structure, they have paid surprisingly little attention so far to what has developed into the most serious fiscal crisis in this nation—the budgets of state and local governments.

To our mayors, who find their missions ever more suicidal, these issues of finance are brought home in specific and inescapable terms. Currently, spending at the state and local level is at a rate of more than $100 billion a year, or approximately $500 per person, having risen in the years since 1946 from a level of only $14 billion, or less than $100 per person. Approximately one-fourth of the expenditure, or $25 billion per year, is spent on the capital facilities that collectively constitute the framework of activities for a city, a village, or a state. Nor does it stop there. A report for the Joint Economic Committee of the Congress recently concluded that state and local government capital outlays for public facilities will reach $40 billion a year by 1975—and this figure may well prove to be too conservative. Moreover, the mathematics of time reach backward as well as forward. Significant portions of the nation's public facility capital are already out-moded, over-aged, and in need of replacement.

The birth of Urbank

In the fall of 1967, a task force was appointed by President Lyndon Johnson to focus on the problems of rapid urban growth. Because the President did not want to distract public and congressional attention from the controversial poverty, slum, and rehabilitation programs, this "Task Force on Suburban Problems" was kept under wraps. Only toward the end of the administration was its existence noted in the press.

There was only one government official on the task force. The balance of the membership represented various segments of the private world, among them industry, finance, education. Through-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

out the fall and winter of 1967 and the spring of 1968, this task force and its staff met privately with Cabinet members and high government officials at the federal and local level. A six-volume report was submitted to the President in the summer of 1968. Proposals covering urban transportation, education, housing, and land banks were made. But the cornerstone of this report was a vigorous recommendation for an Urban Development Bank, familiarly called Urbank, a bank which would be a joint effort of the federal government, state and local governments, and the private sector. In the closing days of the Johnson Administration this concept was embodied in legislation submitted to Congress by Senator John Sparkman and Congressman Wright Patman. It is reported that the Nixon Administration will recommend a similar proposal.

The task force reached the concept of a development bank in trying to find an answer to the question, "Where is the money coming from?" They were reminded of a remark made by Willie Sutton, the famous bank robber, when asked why he robbed banks: " 'Cause that's where the money is." So, too, the task force concluded that, in order to solve those problems generated by rapid urban growth, one first had to look for the money, and then to devise a means of tapping the resources.

State and local governments have three main sources of funds: local taxes, municipal borrowing, and the federal treasury. Municipal borrowings finance about one-half of the cities' capital outlays. The remainder comes from local taxes and federal largesse.

When Joseph Barr, former Secretary of the Treasury, testified in January, 1969, before the Joint Economic Committee that the country would soon be facing a taxpayer revolt, he was referring to federal taxes. What he did not say was that the country was already in the midst of a taxpayer revolt at the local level. It was not only in Massachusetts that tired, irate taxpayers were sending teabags to their legislatures rather than greenbacks. Mayors throughout the country were meeting massive taxpayer resistance. Nor is the individual taxpayer the only stumbling block. The ability of local governments to increase taxes is further limited by competition between jurisdictions. When New York's Mayor Lindsay proposed an increase in taxes on the transfer of stock certificates, the New York Stock Exchange began to negotiate for sites across the river in nearby New Jersey. In short, local officials generally feel that they are up against a ceiling on local taxes.

The news that the federal treasury is bare is hardly news any more. What still may be news to some people is that should there be a speedy end to the Vietnamese war, the demands on the federal treasury will still exceed the supply. Buried at the end of the 1968 Annual Economic Report of the Council of Economic Advisors is a 25 page lecture on post-Vietnam economics. According to a Bureau

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of the Budget study, included in that report, there already exist unfunded proposals adding up to demands on the Treasury *three times* in excess of expected increases in revenues. Daniel P. Moynihan learned this lesson as early as August 25th; and despite subsequent efforts to tone down his pessimistic forecast, the fact remains that the "peace-and-growth dividend" has far more claimants than resources.

There is thus not much that we can do about making more federal grants-in-aid available for urban needs; and the most ingenious strategies of state and local government to increase traditional sources of revenue, or to devise new forms of taxes and user charges, are not likely to bear fruit. This leaves one possibility—the municipal bond market. The task force thus concluded that this was the field of greatest opportunity. For as large and effective as the bond market is, it is neither large enough nor effective enough.

The economics of municipal bonds

An explanation of the world of municipal bonds, or tax-exempts as they are called, is therefore in order. To some, like Senator Proxmire, they are simply anathema because interest on bonds issued by state and local governments is exempt from federal taxes. To others, particularly mayors and governors, they simply mean money and deliverance from a financial dilemma. As a former mayor has put it: "Hell, without this hunting license, we couldn't get near any of the financial fat cats." Yet this bond market, which has more than doubled since 1956, is showing serious signs of strain.

A Strained Market

The bulk of the sales of municipal bonds is made to commercial banks, which purchased 82 per cent of all municipal bonds offered in 1967. More significantly, some 101 banks, with deposits of $500 million or more, held 46 per cent of all municipal securities in that year. Such a narrow market is unhealthy both for the investor and for the municipality.

It means, to begin with, that the municipal bond market is volatile. Most commercial bank business comes from corporate and individual deposits, and it is understandable that corporations and individuals should therefore enjoy first priority on the bank's lendable resources. Fluctuations in demand for business and consumer credit thus create wide swings in the availability of bank funds for the purchase of municipal paper. For example, the net investment of commercial banks in municipals during 1966—when business and consumer demand for credit was high—was only $2.4 billion compared with $8.5 billion in 1967. At the present time, the statistics do not show signs of panic selling of municipal bonds by commercial

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

banks; but the money squeeze has resulted in record high interest rates. Philadelphia, Chicago, Phoenix, St. Paul, San Antonio and many others have had to defer borrowing plans. Many cities and states operating under local limitations find that they have been priced out of the municipal bond market altogether. The Commonwealth of Pennsylvania failed to get a single bid on a recent $22 million bond issue because of the legal ceiling on rates it can pay. California has been out of the bond market for some time because it has a 5 per cent ceiling.

Maturities are Too Short

The bond market is very much like the housing market back in 1932. In those days a five-year term was considered a "long term" mortgage, most home financing occurring on a short-term or demand note basis. Hence, people had to save for the large down-payment, and they also had to accumulate a considerable stream of income in order to meet annual amortization and interest rate charges. Not until the advent of the FHA mortgage-insurance system did long term borrowing become acceptable in the home financing field. And this innovation took several years, as well as the guidance and prodding of Jesse Jones, to be accepted by the financial community. Today, under the Housing and Urban Development Act of 1968, we take for granted amortization periods of thirty and forty years. *This, one can state categorically, has been the financing revolution that has made home ownership possible in the United States.*

Yet at the same time that this revolutionary scheme of home financing has become established and accepted by all groups, the public facilities that provide the indispensable framework for this same housing are still financed on archaic terms resembling the practice of the 1930's. A recent survey made by the Federal Reserve Board indicates that only 9 per cent of all outstanding municipals had a maturity of 20 years or more. More than 66 per cent had a maturity of less than 10 years. It is basically unsound to finance long-term capital works with short-term loans. Yet, this happens, despite the fact that most of the capital expenditures result in substantial, solid, permanent structures with an economic life of 50 years or more, if reasonably well-treated and properly maintained.

Longer terms would reduce the burden of annual debt service for the municipality. By increasing the term from ten to forty years, the annual tax burden is lightened by more than half. Such a decrease can provide a greater incentive for our municipalities to accelerate their rate of development and progress.

The Cost of Money Is High

The cost to our borrowing mayors is high in comparison to the cost of corporate bonds and federal government securities. By objective

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

standards, the rates on municipals are high in light of their exemption from federal income taxes, and, in some instances, from state income taxes; the cost is also not justified by their excellent debt service record—they have a post-war default record second only to that of the federal government.

Because purchasers of municipal bonds have to be close to the 50 per cent tax bracket in order to make such an investment worthwhile, the yield on tax exempts (by any market model) should be approximately half that of taxable bonds of equivalent quality. But such does not turn out to be the case. New York City, for example, recently has been borrowing at costs in excess of 6 per cent. For an investor in the 50 per cent tax bracket, this is equivalent to more than a 12 per cent return on a taxable bond. Because the supply of tax exempts exceeds the demand, new issues have to be priced to attract the marginal investors, i.e., those in the lower tax brackets.

Hence the amount of public subsidy represented by the tax forbearance on the bond interest is not fully passed on to the intended beneficiaries. Yields of municipal securities are currently 70 to 75 per cent of that of top grade corporate bonds. That is a lot more than the 50 per cent one would expect. Studies by the Treasury Department indicate that the average income tax rate (before the introduction of the 10 per cent surtax) is 42 per cent for holders of municipal securities. Translated again into the arithmetic of everyday life, this means the state and municipalities receive only about a half to two-thirds of the benefit from the exemption of interest from federal income taxes.

Or, looked at from our general point of view as national taxpayers, one must conclude that the federal government has an inefficient subsidy on its hand—the loss in tax revenue to the federal government is substantially greater than the benefit to the states and municipalities. This subsidy, furthermore, can only be expected to increase as the demand for borrowings by states and municipalities continues to grow. As we pile more and more reliance on the tax-exempt privilege, the state and local governments that price their bonds on the basis of the exemption will get less and less for them—that is, they will have to pay closer to the market rate of interest on taxable bonds. This is the price paid for going to the well too often.

The Penalty for Smallness

Small communities are frequently penalized on the basis of their size and their inability to utilize the money market. Often they have to pay higher rates, even though the degree of risk involved is not an intrinsic characteristic of size alone. Studies by the National League of Cities show a wide divergence in the interest rates paid by smaller communities, much of which is attributable to the inexperi-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ence of the localities, their lack of knowledge on where to go in the market, and a weak bargaining position in general. Failure to obtain expert advice about bond specifications and the mechanics of sale spells higher costs for many issues.

Uncertainty of the Rating System

In bitter hearings last year, cities and their officials were outspoken about the bond evaluation system that controls their destiny. Two private companies were charged with being the masters of the fates of borrowing local governments: a difference of one notch in the grading classification can add as much as one-half per cent to the cost of the borrowing. When New York City's credit rating was demoted in 1965 from A to BAA, it was alleged to have meant as much as a 1 per cent increase. Since the city borrows half a billion a year, 1 per cent multiplied by the 8 year average life of the bond added up to some $35 million a year of added expense.

Other municipal budget officials have complained that the system itself is incomplete and inadequate—indeed fewer than 20,000 of the more than 91,000 local bodies capable of issuing municipal bonds have been assigned a rating. While the science has advanced from the days when the criteria for evaluating an issue consisted largely of such factors as the number of railroads passing through a town, the quality and methodology of the ratings will continue to come under criticism and suspicion.

A new math for the city

So much for the sagging financial underbelly of our cities and states. In response, several remedial exercises have been prescribed. Perhaps the scheme that has most caught the attention of officials involved is that of revenue sharing. The President has made a promise of a start, although deferred and at a low-scale. The so-called Heller-Pechman plan, by which a share of the federal revenues is given back for use by the states and cities, has indeed much to commend it. But, as the authors of the plan have themselves pointed out, it is dependent upon an increasing flow of federal funds and the existence of a federal surplus (or a willingness to shift from existing programs). And these conditions just aren't there today. To conjure up the picture of a powerful tax system generating new revenues faster than it generates new demands on the federal purse is to indulge in pleasant daydreams.

On the other hand, an Urban Development Bank, as recommended by President Johnson's task force, would be tractable. The Urban Development Bank is a relatively simple device—which is in its favor. Important, too, is the fact that it minimizes the impact on the federal budget because the Urban Development Bank, as proposed,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

would *not* be a federal bank. Although authorized by the Congress, the stock would be held by the state and local governments as well as by private institutions. Patterned after the World Bank, it could do for the developing communities of this country what that bank has achieved for the developing nations.

It would work this way:

The federal government would guarantee the bonds issued by the bank and would provide annual payments to it designed to reduce the interest on loans made to its customers. The Urban Development Bank could make long-term loans to state and local governments for a wide range of capital improvements. It would raise money by issuing and selling its own bonds, *not* tax-exempt, in the private bond market, up to a total of $22 billion for a period of 5 years. These bonds would carry an indirect guarantee of the United States government. The bank would in turn lend the money to communities at an interest rate lower than that at which they can presently borrow, even under their tax exemption clauses. The interest differential between the cost of the money to the bank and the interest received from the borrowers would be made up by an annual appropriation by the Congress. For example, the bank might borrow $1 billion at 8½ per cent interest in today's market and lend to urban communities at 6½ per cent. The Congress would be called on to pay $20 million annually to finance this interest differential. Yet this would make possible $1 billion of local and state capital expenditure. The Treasury calculates that the cost to the nation of the interest differential would be more than offset by additional income taxes on the interest paid on the bank's bonds.

Since the operations are those of a development bank, maturities on loans from the bank could be determined on the basis of sound principles of development finance. Longer maturities (and "grace periods") would permit states and local governments nearly to double their current level of indebtedness without increasing the portion of their budget that has to be allocated to debt service: the annual debt charge on a 40 year loan is less than two-thirds that of a 15 year loan.

In light of the way our lives are dictated by bookkeeping and accounting requirements of the Budget Bureau, one great advantage of this whole proposal is that the cost of the bank to the federal budget would be limited to the annual payments covering the interest differential because the federal government would own no shares. This is an important distinction because should the federal government own shares or loan money directly to municipalities, the loans themselves would count as part of the federal budget. As proposed, the bank would not be a federal instrument; it would, in fact, be run by states, cities, towns, and private enterprise. The shares would be subscribed to by state and local governments and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the private sector, which would elect a majority of the board of directors. The president of the bank, the chairman of the board, and a minority of directors would be appointed by the President, with the confirmation of the Senate.

Clear advantages

Use of the bank would be on a voluntary basis; state or local government could still finance projects directly with the public. Local governments that wished to finance projects, as in the past, by selling their securities directly to the public would still have that opportunity. In fact, the municipal market as we know it would continue to grow—and at a quicker pace—while relieving the pressures on interest rates.

The first job of the bank would be to concentrate its activities in those communities that pay the highest interest rates in today's market because of their small size or their distance from major money markets. The bank could do this by setting its interest rate at a level whereby the top-rated, better credit communities would find it cheaper to continue to tap the public market directly. For example, a 6½ per cent interest rate today would probably be unattractive to a community such as Scarsdale, but definitely attractive to communities such as Baton Rouge and Little Rock.

In addition, there would be numerous occasions when a larger community might want to borrow more than the bank would be willing to lend. For example, Cincinnati might want to borrow $150 million and the bank might wish to limit its loan to $50 million. However, the bank might also be willing to organize a group of other lenders—much in the way the World Bank has done in various regions of the world—to make up the balance, and it could thus act as a financial advisor or investment banker.

Unlike the Patman-Proxmire Bill, now under discussion, which would require communities to waive their tax-exempt privilege in return for federal guarantees and interest subsidies, the Urban Development Bank would allow communities to continue to issue *only* tax exempt securities: in some cases the bank would purchase these securities, in other cases, the public would.

The advantages of Urbank are many. The cost to the taxpayer would be minimal; indeed, there might be no cost to the taxpayer at all because the Treasury would collect income tax on the revenue of the bank's bonds. For municipalities, it would mean a chance to borrow at a lower rate of interest, and on long terms, without the danger of flooding the existing bond market and raising its costs even higher. For the citizens of this country, it would mean a chance to purchase and install capital facilities now, while they are needed, rather than later when they might be too late. "Development lend-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ing" recognizes the principle that the benefits of heavy expenditure will last over many generations; repayments of such investments are therefore geared to the life-span of the benefits. Finally, there is good reason to expect that these investments will bear fruit in later years —in increased property values, in increased municipal revenues. It would be logical to expect that the developing communities—given a fair interest rate and a reasonable period of time over which to pay for the borrowing—could ultimately repay the assistance given today, and that from the point of view of the federal taxpayer a loan program would be more appropriate than a grant program in growth situations.

Making creative federalism real

Of long-range interest to proponents of the Urban Development Bank is not only the prospect of providing money for urban growth, but also its use as a mechanism to improve our intergovernmental system. Repeatedly, in all the Kennedy-Johnson task forces on domestic affairs, the problem of the interrelationships among state, federal, and local government kept defying logical solutions. The problem is still being discussed, with no greater apparent success; and yet it is crucial. Take, for example, the case of the Philadelphia Expressway.

In that instance, working out a grant for a cover over the road in order to preserve harmony of land use and the view to Independence Hall required conventions and assemblies (and time-consuming negotiations) of state officials from the Governor's office, the Department of Public Works, the Budget Department, city officials from the Mayor's office, Transportation Department, Planning Board, legislative councils, federal officials from HUD, DOT, Interior, Budget Bureau, and the Vice President's office, and of various private and citizens' groups ranging from the Architects Associates to the Old Philadelphia Trust. Surely too many cooks.

The task force hoped to develop a system that would achieve a new relationship among the various levels of government. There are today 21 federal departments and agencies, more than 150 major bureaus in Washington, and over 400 regional and subregional federal field offices that do business with state and local governments. By one count these many offices administer more than 175 federal aid programs, providing for more than 400 separate legislative authorizations. Programs for urban development range from "information and guidance on flood hazards," administered by the Defense Department, to the multibillion dollar urban renewal program. Fifty state governments, with thousands of independent departments and agencies, participate in the administration of three-fourths of these federal grant-in-aid funds.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Yet, on the other side, there are broad and obvious gaps in most community development programs. State and local officials continue to report serious difficulties in learning what assistance programs are available, what doors to knock at, even which federal agencies administer them at a particular moment, and which of the changing forms have to be filled out in sextuplicate today. Delays of two or three years are not uncommon pending an application, negotiation, or revision of proposals. "Waiting for federal money is measured in cherry blossom seasons," is one observer's wry comment.

The concept of the bank emerges out of the conviction that the one program the mayors and the governors can use best is money. A recent bureaucrat recruited from Wall Street pointed out that the Chase Manhattan Bank also runs many loan programs for manufacturing, oil drilling, shipping, and transportation. But, as far as its customers are concerned, there is only the one program of money. This simplifies procedures. Coordination is then achieved by financial planning and capital budgeting.

Currently, we have a vast federally-assisted exercise in planning for cities, for metropolitan areas, and for states. The plans encompass physical, social, and economic development goals. They are required under federal statute to ensure coordination. Too often this effort produces letters to Santa Claus and has proved to be an exercise in futility. Partly this is due to the utopian scope of the planning itself, which avoids financial realities and concentrates on hopes. Partly it is due to the resentment by the cities of federal requirements. Yet, on the other hand, it is normal for a banker to require *financial* planning from his borrowers and to assist his borrowers in making such plans. This kind of planning makes more sense to the borrower—and is of more use to the lender—than much of what is called planning in the urban sphere today. If cities are represented on the board of the Urbank, they should be more receptive to requests for this kind of planning and coordination than they are to the complicated federal requirements. At the same time, it would be appropriate for the bank to give high priority to regional, metropolitan, and multipurpose projects which will support area planning, consolidation of the public facility activities of several communities, and suburb-central city cooperation.

The need for technical assistance

Finally, one must be impressed by the evidence of the need for technical assistance, particularly financial, at the local level. The successful development, growth, and prosperity of a community depends more on its leadership and management than on any other single factor. The raising of money for even a small city is big business, requiring specialists, which too often it does not have. A city such

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

as Boston raises $288 million in taxes and borrowing a year. A corporation the same size would have a substantial corporate finance staff, with a $75,000 a year vice president. Boston has nothing like that.

Nevertheless, the need for technical assistance in solving the mathematics of urban development remain largely unrecognized. Local government organizations frequently operate under antiquated legislation and practices; even the faster growing and most progressive local government organizations operate without the benefit of advanced techniques and the latest information and research. The bank could help change this picture. It would represent a modernized way of handling assistance, coordinated with—but outside—the traditional bureaucracies. The experience of the World Bank confirms that financial assistance and technical assistance can and should be combined.

The lending function is primary; but the bank could be utilized as a lever in bringing about better urban growth and development. Proponents of the bank believe that its charter should be wide enough to tolerate both objectives. Such an approach cannot merely help broaden the sources and decrease the cost of capital funds for state and local governments; it can, potentially, do very much more. For example, it can encourage maximum private investment in urban communities by guaranteeing loans and other investments made by private enterprise. Or, it can cooperate with state, regional, county, and municipal authorities to help formulate, finance, and implement regional and area development programs. Or again, it can facilitate the exchange of innovative concepts and techniques among cities, touching on such troubling issues as the evaluation of priorities, the formulation of project proposals, and better selection of projects as to scale, location, administration, and areas served. Or yet again, it can help provide an expanded and more stable aftermarket for securities issued for urban growth and development. All in all, the bank offers the possibility of a more viable, a more dependable financial structure through which sound urban development can be financed, fostered, and even guided.

In the 1930's, the economic system was supple enough to invent new financial mechanisms to solve analogous problems in the housing and mortgage capital markets. Is it too much to hope for similar creativity today? Must the mathematics of urban growth remain the Mock Turtle's "different branches of Arithmetic—Ambition, Distraction, Uglification and Derision"?

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

CURRENT READING

Found: $45 Billion

The normally staid *American Economic Review* leads off its June, 1969 issue with an article boldly entitled, "$45 Billion of U.S. Private Investment Has Been Mislaid."

The author, Robert J. Gordon of the University of Chicago, begins with the outline of a statistical puzzle. Although output and capital in the private sector grew roughly at the same rate *before* 1929 and *after* 1948, between those dates a 57 per cent increase in private production was achieved by the addition of only one per cent of private capital. How was this possible? The average capital output ratio has been about 2.4 per cent. How did the United States economy produce so much extra output during that period with such an apparently small increase of plant and equipment?

The answer indicates how inadequate governmental accounting procedure can befuddle economic analysis. In the National Income and Product Accounts (NIP), the government output is not valued at market prices because it is not sold. But as Professor Gordon points out:

> Any productivity study is misleading if it includes all of private output but neglects part of the capital which was used to produce that output. This, unfortunately, is the fate which has befallen all previous studies, because the U.S. national accounts have failed to keep track of government capital. Government purchases of industrial structures and equipment are lumped in with all other government current purchases of goods and services, and there is no published series on the amount of government capital which has been used during the past 25 years to produce private output.
>
> The amounts involved are not trivial. In the spring of 1945, private firms were producing steel ingots at a full capacity rate, but they owned only 90 per cent of their fixed capital input; the other 10 per cent was owned by the government. Boeing, Grumman, Republic, and other private firms were rolling out aircraft at an unprecedented pace, but the planes were rolling out through government owned doorways and the supervisors congratulated each other from government owned chairs and desks. Nor were government facilities merely a wartime phenomenon. After the war in 1947, for example, Alcoa, Reynolds, and Kaiser produced half of the nation's aluminum output in government owned plants. In 1951, about half of our rubber supply was synthetic,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and all synthetic rubber was produced by private firms in government owned plants. Even today, 123,000 employees of private firms work in plants and laboratories owned by the *Atomic Energy Commission,* having a gross book value of over $8 billion. Much of the aircraft and ordnance production for the Vietnam war has been carried on by private firms with government owned plant and equipment. And, similarly, almost all of the construction, testing, and firing of rockets in the U.S. space program has been performed by private contractors in government owned facilities. In addition, the production of commercial aircraft is carried on partially through the use of government financed equipment. . . .

In effect, concludes Professor Gordon,

$45 billion treasure chest of plant and equipment which the U.S. Government has purchased for the use of private firms since 1940, but which has never been counted as part of the private U.S. capital stock. The major conclusion is that the neglected assets explain a substantial portion of the decline in the manufacturing capital-output ratio during World War II and the early postwar years, since the addition of these assets results in a 33 per cent increase in the manufacturing capital stock between 1940 and 1945, as compared to the two per cent increase shown in previous data.

Affluence Observed

In the course of replying to a critic in the Journal of Political Economy *(July-August, 1969), John Kenneth Galbraith, in passing, reveals what his books have earned him over the years. He writes:*

"I have always thought it an elementary test of an economist's practical competence that he provide himself—legitimately and without obvious professional compromise—with whatever money he might need. This I have done for thirty or more years with relatively little effort helped by some luck. But Professor Gordon has exaggerated sadly the returns to be made from writing in our time and society. Others have indicated curiosity, and I see nothing against a full disclosure. In the seventeen years since its publication in 1952, *American Capitalism* (1952) in all editions has earned $35,000. *The Affluent Society* since 1958 has earned $138,000 on the American edition and perhaps $20,000 as an absolute maximum (a considerable compilation task would be involved in knowing) on the British edition and the twenty or thirty translations. A common price for a translation was $150. The average over the nine years to the publication of *The New Industrial State* was thus $17,500 a year. But I allotted a substantial portion, perhaps half when I was in Cambridge, to secretarial, research, and other assistance for *The New Industrial State* or academic duties along the way. It is not without interest that in the United States the author of even a very successful book (as I assume I can describe *The Affluent Society)* would not live in very splendid fashion in the absence of other income. A new edition of *The Affluent Society* will appear this year, and because of improved bargaining position the revenues will be substantial. However

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I no longer receive them. *The New Industrial State,* combining large sales with improved bargaining position, does promise to be substantially more remunerative than the earlier books. It remains that all who want effortless wealth are strongly advised to have invested some years ago in IBM.

The Magical Box

College students taught in the crowded lecture halls of the multiversity learn as much (or as little) as students taught in small discussion groups, tutorials or by any other method.

By the time Robert Dubin and Thomas C. Taveggia of the University of Oregon had searched through the data from ninety-one comparisons of different methods of college teaching, going back as far as 1924, they were convinced that there are no differences in effectiveness between one teaching method and another. (*The Teaching-Learning Paradox,* Center for the Advanced Study of Educational Administration, University of Oregon, 1968) The truth is that learning is a kind of black box; teaching goes in, and student performance comes out, and no one really knows what goes on inside the box.

The studies reviewed by Dubin and Taveggia compared the examination performance of students who had been taught in lectures only, in lectures supplemented by discussion sections, discussion sections alone, tutorials and in programs of supervised and unsupervised independent study. They found, for example, that in eighty-eight comparisons of straight lectures with smaller discussion groups, forty-five showed the lecture students getting higher grades, and the other forty-three showed discussion students doing better. In eight comparisons of lectures alone vs. lectures combined with discussion sections, three favored the lecture method, four favored the combination method, and one showed no difference at all. Nor does it seem to matter whether the professor is present or not: in eighty-one comparisons of some kind of face-to-face instruction with independent study, forty showed the students doing better when they worked alone and forty-one showed them getting better grades when they met with a professor.

These results, as Dubin and Taveggia are very careful to make clear, are based on the *data* from the ninety-one studies; if the analysis had been done in terms of the conclusions the authors of those studies had arrived at, the picture would be very different. For what is most striking about this analysis is not its very convincing findings, but the persistent refusal over a period of forty years of the earlier researchers to be persuaded by their own results. Starting with a philosophical bias in favor of small groups, the researchers set up studies designed to corroborate that conviction with scientific evidence. When the evidence failed to prove their point they brushed it aside. . . . *Transaction, October, 1969.*

The World's Poor

It is quite inaccurate to suppose that the poor of the world are steadily growing poorer. The Pearson commission's report to the World Bank

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

estimates that between 1960 and 1967 the less developed countries increased their real gross domestic products by an annual average rate of 5 per cent, which is actually a rather better growth rate than industrialized countries achieved. It is true that accelerating population growth in poor countries then trimmed back their annual growth in real incomes per head to only between 2 and 2½ per cent, but this was still better than Britain and Europe were achieving at the equivalent early stages of their nineteenth-century industrial revolutions. At present growth rates, the world's poor should quadruple their incomes per head in 60 or 70 years. This would bring the better off developing countries (such as Mexico, Chile, Gabon) to present west European living standards by then; but it would leave the worst off (such as India, Indonesia, Nigeria) still struggling to reach present Mexican standards in 2040.

Nevertheless, the opportunity is beckoning. The biggest human news of the past three years has been the breakthrough in Asian and other agricultural production as new advances in seed research, irrigation practices, and price incentives have caught hold. Pakistan has increased its wheat production by 50 per cent in two years, Ceylon its rice production by 34 per cent in the same period, India has surged to an annual growth in food output of 7.2 per cent in 1966-68 (against 0.1 per cent in 1960-66). . . . *The Economist,* October 4, 1969.

American Youth—A Statistical Portrait

Who, where, and how numerous are the young in post-Woodstock America? A memorandum, prepared for the Urban Affairs Council, addressed itself to this question and came up with the following data:

We have defined youth as everyone between his 14th and 25th birthdays, an eleven year age span in the life of a young American, and that part of the population born from 1944 through 1954. The group so defined numbers about 39 million at the present time, about double what it was at the turn of the century. Like most other groups in our population, it will continue to grow, to about 46 million by 1985. But despite this big increase in numbers, this group's share of the total population has remained almost constant over time, hovering around 20 per cent of all Americans.

Thus it is clear that the population of the United States as a whole, is *not* getting younger, although the *young* population is getting bigger. In fact, the median age rose from 24 in 1910 to 30 in 1950. It has declined slowly for the past 20 years, and the median age of our population now is about 27 years and 8 months. But the decline seems to have stopped, and in 1985 the median age will probably be six months older than it is now.

Although the proportion of young people in the population is not growing very quickly, what *has* increased rather dramatically in recent years is the proportion of those young people who are in *school.* In 1950, 38 per cent of this age group was enrolled in schools at all levels. Last year, the figure was 54 per cent, representing about 21 million students drawn from the youth population.

When we separate the high school and college groups, we find that

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

high school enrollment has more than doubled in 20 years, from about 6 million youngsters in 1949 to more than 14 million this autumn. Comparing high school attendance with the high school age group, the 14 to 17 year olds, we see that high school enrollment is equivalent to 94 per cent of the whole age group at the present time. We have, in short, become a nation where almost everyone goes to high school, and where more than three-quarters of our young people now *graduate* from high school.

Turning to college enrollment, we find even more dramatic growth, although the numbers are smaller. This autumn, a little over 7 million students enrolled in our colleges and universities. Almost 90 per cent of them are undergraduates in 2 and 4 year colleges. This is nearly 3 times the number going to college 20 years ago.

The best available information indicates that now about 40 per cent of all American young people go to college for at least a year. If we add those who go to technical schools and other kinds of post-secondary education, the proportion approaches 50 per cent. This chart compares college enrollment with the college age population, and we can see that the proportion of young people who go to college has nearly doubled since 1949. By way of comparison, this is about 2½ times the college-going rate in England, where the figure is less than 20 per cent. We know generally who goes to high school. Practically everybody does. But what do we know about the background of college students? First of all, Negroes are underrepresented. Last year's freshman class in American colleges was about 6 per cent black, although the age group is twice that. And although college students come from every economic level, they are disproportionately well-to-do. Wealthy families account for about 3 times their share of college students, and poor families for just one-third of *their* share. A youngster whose father earns more than $15,000 a year is about 9 times as likely to go to college as one whose father earns less than $3,000. We might expect that this trend would carry over to the educational backgrounds of college students, and that they would come from college-educated families. And yet, most college students come from families whose head did not even enter college, and only a quarter of them have fathers who *graduated* from college.

We also know a little about the religious background of American college students.

¶Protestants comprise about two-thirds of the nation's population, but only about half of its college freshmen.

¶Contrary to what a great many people think, Roman Catholics are overrepresented in college.

¶Youngsters from Jewish homes are 5 per cent of college students, although the Jewish population is just 3 per cent of the nation's total. It appears that about 80 per cent of Jewish youngsters at least *enter* college.

Departing from college students, and looking at the whole 16-24 age group, we find that:

¶43 per cent are students, and 57 per cent are not. A slightly higher proportion of the white population is in school than of the Negro.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

¶About 7½ per cent of the age group is in the armed forces. Here, too, Negro youngsters are *underrepresented* by about 2 per cent.

¶Almost one-third of the age group is employed in civilian occupations, and 2.8 per cent is unemployed. If we look only at the *labor force* group, however the employed and the unemployed we find an 8 per cent unemployment rate for the whole age group, rising to nearly 15 per cent among the Negro young.

¶Finally, those who are left and are not in the labor force at all, about 14 per cent of the whole age group, are principally young married women who are housewives.

What are the consequences of all of this for the nation's adult population? First, it is evident that we are increasingly a nation of high school graduates—from 13 per cent of the population over 25 in 1910 to 54 per cent at the present time, a figure that will grow to nearly 69 per cent within 15 years. Further, although we have lots more college students than we used to, this is not a nation of college *graduates*, nor will it be in the near future. Eleven per cent of our population over the age of 25 graduated from a 4 year college; the proportion continues to rise, but in 1985 the figure will be just 14 per cent.

In summary, we find that:

¶The United States has almost 40 million young people, but the nation as a whole is not getting younger.

¶The youthful population of the United States is increasingly a *student* population, although more than 40 per cent of the age group is not in school.

¶Practically everyone now goes to high school, and the number of college students, though still under 8 million, has nearly tripled in 20 years.

¶The college population overrepresents youngsters from white, middle class, relatively well-educated and well-to-do homes, and slightly overrepresents Catholic and Jewish youngsters, although a great many college students come from every segment of the nation.

¶Young people who are *not* in school are doing pretty much what we might expect them to be doing, but they have a high unemployment rate, especially among the Negro young.

¶We have a great many young people in college, but the vast majority of adults have only gone to *high school.* This may partially explain why so many adults are so puzzled by the behavior of so many college students.

The Most Unbelievable Thing

On April 11, 1969, two days after the Harvard SDS had occupied University Hall, Alexander Gerschenkron, professor of economic history at Harvard, spoke memorably to the faculty about the students' action. He said, in part:

Your trouble is that you have not studied the literature of the subject. I am not going to give you a long reading list, but I must summarize for you one single item on that reading list. This is a fairy tale by Hans Christian Andersen, a fairy tale which, in the dark days of the nazi

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

occupation, the Danes used so subtly and so effectively. That fairy tale is called 'The Most Unbelievable Thing.' There was a kingdom, and in the kingdom there was a king, and he had a princess, and he was interested in the progress of arts. And at a certain point he announced that he would give the princess in marriage to the man who would accomplish the most unbelievable thing.

And there was great excitement and tremendous competition in the land. Finally, the great day came when all those prepared works had to be presented for judgment. There were many marvellous things, but towering high above them was a truly wonderful thing. It was a clock, a clock produced by a handsome young man. It had a most wonderful mechanism, showing the calendar back and forth into the past and into the future, showing the time, and around the clock were sculptured all the great spiritual and intellectual figures in the history of mankind.

And whenever the clock struck, those figures exercised most graceful movements. And everybody, the people and the judges said that yes, to accomplish a thing like that was most unbelievable. And the princess looked at the clock and then looked at the handsome young man, and she liked them both very much. And the judges were just about to pronounce their formal judgment, when a new competitor appeared, a low-brow fellow. He, too, carried something in his hand, but it was not a work of art, it was a sledgehammer. He walked up to the clock and he swung out and with three blows he smashed up the clock and everybody said, why, to smash up such a clock, this is surely the most unbelievable thing, and that was how the judges had to adjudge.

And this is relevant to the present situation at Harvard.

It is now 100 years since President Eliot started converting what after all was an ancient but rather obscure college into a great university, the greatest university in the land. What has taken 100 years to create can be destroyed in as many weeks. This University, like the clock in the story, like all great works of art, is a frail and fragile creation, however beautiful, and unless you do something about it, and unless you let the administration do something about it, this wonderful work of art will be destroyed, and the guilt will be yours.

The Latest Economics

In The Radical Teacher, published by the New University Conference, there is an article by Professor Mike Zweig, of the State University of New York at Stony Brook. Its title is "Radicalizing Introductory Economics."

People all over the world are fighting for freedom—from oppression by racists, from domination by imperialists, from want generated by scarcity and consumerism alike, from "the national interest." Oppression is the problem. Liberation is the solution. Increasing numbers of economics faculty and students are trying to construct an economics and an economy which will be part of the solution, not part of the problem. . . .

This semester I am teaching an experimental section of a proposed new one-semester introductory economics course at the State University

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of New York at Stony Brook. The course proceeds through six broad areas of concern: 1) The social context and development of economic thinking; 2) Private property; 3) Economic class; 4) Markets; 5) Business cycles and national employment; and 6) Technology. Some radical economists balk at teaching market and aggregate analyses, which are, after all, essential elements of standard bourgeois theory. I think it is important for students to know this material, since it dominates the field, but to study it in historical and ideological context. Therefore we allow time to explore other substantive elements of the economic structure—usually ignored in introductory economics courses—such as private property and class. . . .

The economics department at Stony Brook recently adopted this course unanimously to substitute for the traditional two-semester sequence. . . .

Examinations and grading will be handled in the sections, with the understanding that the students will also be examined on the lectures. This semester, each student in my class is responsible for preparing (outside of class) something which "manifests intelligence" about ideas read about or discussed. These manifestations can take any form—e.g., epic poem, other poem, play, essay, letter, collage, mixed media, etc. They need only be substantial, intelligent, and insightful. Most students write essays, out of habit I suppose, but occasionally other work is submitted, and if I have trouble discerning substance because of unfamiliarity with form, I talk about it with the student. . . .

Where It All Ends Only Knows System

To C. West Churchman, the System is our cathedral. A philosopher, theorist of operations research, and professor of business administration at Berkeley, Churchman writes in his new book, *Challenge to Reason,* that the vice of contemporary thinking (and of management) is the failure to comprehend the nature of "whole systems." What is a system? The entire relevant world.

"In place of the term *God,*" he writes, "the term that typifies our gropings for a twentieth century rationalism is *system.* A system is rational: it explains, it unifies, it does all the things for its components that Spinoza's and Leibniz's God did for their."

Spinoza's God, however, is self-creating and free, possessed of infinite attributes and the cause of all things. Perhaps Professor Churchman's *God* is more like Norman Mailer's definition of a plumber: a man whose job it is to prevent treachery in closed systems.

Acronyms

If you are old enough, you will remember WPA, PWA, AAA, CCC, NYA, NRPB, and similar agencies set up by the New Deal administration and identified, usually, only by their initials. In many cases, people no longer remembered, if they ever knew, what the initials stood for. Many of these agencies have disappeared, many—the SEC, NLRB, FCC, FPC—remain.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Acronymics, or sets of alphabetic contractions, constitute the fastest growing international language in the world today. Although it started long before the Roosevelt administration (e.g., ICC), it received its first exponential boost during the New Deal, expanded enormously during the war (especially with initials denoting command posts of army and navy officials) and now has been taken up by activist organizations to give a hortatory flavor to their efforts (e.g., FIGHT), and counter groups to rally support in their fashion (e.g., CONSCIENCE—Committee on National Student Citizenship in Every National Case of Emergency).

Inevitably, the numbers grew so large that there had to be a reference dictionary. In 1965, the Gale Research Corporation brought out *Acronyms and Initialisms Dictionary* with 12,000 entries. In 1965, a second edition appeared, containing 45,000 organizational acronyms. A 1968 supplement uncovered some 13,500 new ones since the second edition; and a 1969 supplement, we are now told, will provide 13,500 new listings. In short, a grand total of 73,000 acronyms to remember.

Well, where does PI stand in all this? It is the sixteenth letter of the Greek alphabet, of course. It is also the ratio of the circumference to its diameter. Above all, it is not a root of any rational algebraic equation; and from this follows the all imporant political commandment: you cannot square the circle by ruler or compass.

The Literary Front

In The Chronicle of Higher Education of November 3, Malcolm G. Scully covers the news at the literary front.

> The Midwest Modern Language Association billed its annual meeting here as an experiment in whether or not radical faculty members and their more traditional colleagues could hold meaningful joint discussions.
>
> The results were mixed. Many officials of the association were pleased that the meeting occurred without disruptions. Many radicals were angered that they did not provoke much reaction, positive or negative, from the majority of the association's members.
>
> "They let us in so they could go ahead and do what they planned to do," commented one.
>
> To put its plans into effect, the association—which is an autonomous regional branch of the Modern Language Association of America—granted the New University Conference, an organization of radical faculty members, status as an "associated" organization.
>
> The conference was allotted meeting space in the hotel, and had its schedule of sessions printed in the association's official program.
>
> "We hoped to provide a means by which radical, liberal, and traditional academicians can come together and talk with each other," said Carl H. Klaus, executive secretary of the association.
>
> Officials of the association felt that such discussions were crucial, Mr. Klaus said, since "what's really at stake is the destiny of the academy. There is the possibility that divisiveness will become so divisive that it creates an implosion in the universities."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The only specific confrontation during the three-day meeting came at the business session. The radicals were angered that the session was adjourned after the association had acted on only two of their five proposed resolutions.

The association voted to adjourn the meeting so that it would not take time away from other sessions. Later, officials said they would expand the length of next year's business meeting.

During the business session, the membership adopted a radically backed proposal supporting the moratorium on Vietnam, and calling for the "immediate, unilateral withdrawal of all U.S. troops from Vietnam." The vote was 143-103.

However, they eliminated parts of the resolution which would have committed the association to defending its members from reprisals for participating in the moratorium, and to supporting the "Provisional Revolutionary Government of South Vietnam."

The membership also voted down a radical proposal to change the topic of next year's meeting from "Literature and the Other Arts," to "Class Bias and Literature."

Resolutions, which were not considered, concerned broadening participation in the association, ending "economic discrimination" against working-class students, and providing day-care centers for children of members during the annual meeting.

While the business meeting provided the only direct confrontation of radical views with those of the more traditional members of the association, speeches by Louis Kampf, second vice-president of the Modern Language Association and a New University Conference leader, and by Paul Goodman, author and social critic, revealed some implicit conflicts.

Mr. Goodman, who spoke on "the plight of a man of letters," said that American youth are so appalled by the failure of their country's institutions that they have become almost impossible to teach.

"It is impossible in teaching English to try to make a young person see that John Milton was for real," Mr. Goodman said. "The earliest possible date in history for them was what happened at the Democratic Convention last year in Chicago. Nothing happened before that."

Mr. Goodman said also that the young bring prejudged conclusions to what they read. "You're either going to say so-and-so is a pig, or that the youth are all anarchists. The fact that you might want to say some third thing is considered impossible."

Mr. Goodman's remarks received a few hisses from the audience, and in the following speech, Mr. Kampf accused him of "seeking cheap laughs at the expense of the young."

Mr. Kampf attacked current trends in literary scholarship as being "profoundly counterrevolutionary."

Most scholars interpret literature in terms of some tragic, or ironic, vision of man's nature. Since such an interpretation "embodies the concept of fate, it denies politics," Mr. Kampf said. He added that because such an interpretation denies the possibility of political progress, it enforces the status quo rather than serves the cause of revolution.

Contemporary scholars, Mr. Kampf said, comprise a group of "literary

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

experts who parade their cultural opulence before an elite audience." Instead of continuing such criticism, he said, scholars "must begin by concerning themselves with the global role of the United States." To do such, a scholar must be a radical or a revolutionary, Mr. Kampf added.

"Clearly," he said, "there are occasions when we should not be teaching literature at all—when we should be teaching something else, or not teaching at all."

When the meeting ended, both radicals and officials of the association were hesitant to speculate on how successful the experiment had been.

"I don't regard this as a victory," said Alan M. Hollingsworth, president of the association and professor of English at Michigan State University. "To have a victory, you have to have some sort of battle, and we didn't have one here. But I dc regard this as a really creative event."

Mr. Hollingsworth said that the radicals are trying "to politicize our intellectual life, and we're trying to intellectualize their political life." It was too early to say whether either development occurred at the meeting, he added. "We'll see what happens next year." . . .

Tax Revenues in Suburb and City

One often hears it said that President Nixon's revenue-sharing program, in which funds are to be allocated to cities on the basis of local tax revenues, will end up rewarding the wealthy suburb at the expense of the central city. In a recent speech to the International City Management Association, Murray L. Weidenbaum, Assistant Secretary of the Treasury, gave some interesting—and contrary—statistics:

> We are unable to find any evidence to support the contention that suburban governments raise more revenues per capita than the central cities. In fact, the reverse is true in many specific instances. For example, New York City raised $405 per capita in general revenues in 1967-68 (which are the latest figures available), while New Rochelle raised $153, and Mount Vernon $122. For all cities of one million or more, the average per capita revenues were $256, compared to $79 for cities with population of less than 50,000.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Issues Back in Print: @ $2.00

No. 1 (Fall 1965)

Daniel P. Moynihan The Professionalism of Reform
Robert M. Solow Technology and Unemployment
Robert L. Heilbroner Men and Machines in Perspective
Robert A. Nisbet The Permanent Professors
Daniel S. Greenberg The Myth of the Scientific Elite
Jacques Barzun Art—By-Act-of-Congress
Nathan Glazer Paradoxes of American Poverty
Eveline M. Burns Where Welfare Falls Short
Martin Diamond Conservatives, Liberals, and the Constitution
Timothy Raison The British Debate the Welfare State
Daniel Bell The Study of the Future

No. 2 (Winter 1966)

Irving Kristol The Troublesome Intellectuals
Victor R. Fuchs The First Service Economy
Christopher Jencks Is the Public School Obsolete?
James Q. Wilson Corruption: The Shame of the States
Martin E. Segal The High Cost of Hospitals
Richard E. Neustadt White House and Whitehall
Adam Yarmolinsky Ideas into Programs
Bennett M. Berger Suburbia and the American Dream
George A. Miller Thinking Machines: Myths and Actualities

No. 3 (Spring 1966)

Daniel Bell Government by Commission
Daniel P. Moynihan The War against the Automobile
James Q. Wilson The War on Cities
Earl Raab What War and Which Poverty?
Charles A. Reich The New Property
William A. Glaser "Socialized Medicine" in Practice
Milton Friedman A Free Market in Education
Nathan Glazer The Negro American

No. 4 (Summer 1966)

Irving Kristol New Right, New Left
Alvin L. Schorr On Selfish Children and Lonely Parents
Peter F. Drucker Notes on the New Politics
James Tobin The Case for an Income Guarantee
Daniel J. Elazar Are We a Nation of Cities?
George C. Keller The Search for "Brainpower"
James S. Coleman Equal Schools or Equal Students?
John William Ward The Trouble with Higher Education
Charles E. Lindblom The Rediscovery of the Market
Virginia Held PPBS Comes to Washington
George P. Elliott Marshall McLuhan: Double Agent

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED